APPENDIX F

Early American Manual Therapy Perspectives on Headache

The Early American Manual Therapy (EAMT) collection consists of a variety of texts and articles from the late nineteenth and early twentieth centuries. Due to the abundance of osteopathic texts available from this period, this body of literature predominates the EAMT collection, although mechanical vibration, spondylotherapy, and massage are also represented.

I have attempted to include sufficient documentation of the cause and treatment of headache (both primary and secondary) to provide a sense of what type of therapy would have been given to an individual with a Cayce reading who would have been referred to one of these practitioners. Also, I find the various descriptions and classifications of headache interesting and worthwhile in view of the Cayce material. I have added **bold type** to accentuate words and phrases that are particularly relevant to this report.

"In all **continued or periodic headaches** I have found the shut-off in the bones of the neck at their union with the head and in the other joints **as far down as the fourth dorsal and even as far as the lumbar, sacrum and coccyx**. I have found abnormal positions of both bone and muscle resulting in the production of such effects." (*Osteopathy Research and Practice*, A. T. Still, 1910)

"One day, when about ten years old, I suffered from a **headache**. I made a swing of my father's plow-line between two trees; but my head hurt too much to make swinging comfortable, so I let the rope down to about eight or ten inches of the ground, threw the end of a blanket on it, and I lay down on the ground and used the rope for a swinging pillow. Thus I lay stretched on my back, with my neck across the rope. Soon I became easy and went to sleep, got up in a little while with headache all gone. As I knew nothing of anatomy, I took no thought of how a rope could stop headache and the sick stomach which accompanied it. After that discovery I roped my neck whenever I felt those spells coming on. I followed that treatment for twenty years before the wedge of reason reached my brain, and I could see that I had suspended the action of the great occipital nerves, and given harmony to the flow of the arterial blood to and through the veins, and ease was the effect, as the reader can see. I have worked from the days of a child, for more than fifty years, to obtain a more thorough knowledge of the workings of the machinery of life, to produce ease and health. And today I am, as I have been for fifty years, fully established in the belief that the artery is the father of the rivers of life, health, and ease, and its muddy or impure water is first in all disease." (Autobiography of A. T. Still, Andrew Taylor Still, D.O., 1897)

"Headache -- that is very little bother to you people that have it two or three days at a time. Who but an Osteopath can tell you what headache is? Mr. Dunglison, will you please explain to the people what headache is? "Headache is a peculiar condition, either with cold or hot temperature of the head, with an increased or diminished flow of blood. I would suggest a copious vomit." Here is your definition of headache by Dunglison. And how much wiser are you for it? Go to an Osteopath: "What makes the brain hurt?" He will answer you: "What makes a pig squeal, a calf bawl, a child cry when it is hungry?" You have a cold condition of the head. The cerebral arteries are not supplying the brain with nutriment. Therefore it gets very hungry, and miserably hungry too. When the veins assisted by the motor nerves, or those that convey blood in its circulation, become obstructed, pain follows, which is the effect -- headache." (*Autobiography of A. T. Still*, Andrew Taylor Still, D.O., 1897)

"Toxemia. - Backache due to toxemia is nearly always of sudden appearance. The fact that the patient first becomes conscious of its existence when some movement is made such as quickly sitting up in bed, or bending forward to pick up something, or putting on clothing, always leads to the belief that the pain is due to strain. Nearly all such cases show a coated tongue, bad breath, constipation, headache, and general physical depression. The pain is not necessarily located in the erector spinae muscles. It is frequently localized around the fifth lumbar spinous process, which is exceedingly sensitive to digital pressure. There may be some fever in the cases for twenty-four hours. Thorough catharsis is indicated and usually is followed by rapid decrease in pain. The pain in most of these cases is only present during voluntary movement. The physician can usually give quite extensive passive movement without causing severe pain." (*Principles of Osteopathy*, 4th Edition, Dain L. Tasker, D.O., 1916)

"Inhibition of Suboccipital. - When there is a high blood pressure in the head and the patient is suffering with headache it is possible to give great relief by steadily inhibiting in the suboccipital fossae and temples, as illustrated by Fig. 254. All nervous conditions are greatly reduced by this movement. The inhibition reduces the number of sensory impressions, and lessens the tension of blood vessels all over the body. This inhibitory movement should be used in cases of epilepsy and delirium tremens during the excitable stages. Have an assistant inhibit in the splanchnic area, thus causing a general reduction of blood pressure in the superficial and deep tissues of the body and extremities. The blood is thus drawn away from the head, and the patient becomes quiet." (*Principles of Osteopathy*, 4th Edition, Dain L. Tasker, D.O., 1916)

"These attacks had been brought on by any sort of housework, at first only sweeping or such work as required arm leverage. Later it seemed as though the attacks came without any mechanical reason. They were accompanied by **severe headache**, tachycardia, meteorism, cold extremities and subnormal temperature. As might be expected in such a case the **spinal lesion picture was a mixed one and it seemed, in view of so many symptoms of autointoxication**, as though the **mid dorsal lesions** were more nearly primary than the others. The sensitiveness of this spinal column was so great and so many compensations were in evidence that it was deemed best to attempt at first merely to simplify the symptom complex as much as possible by giving

the spinal column physiological rest. The patient was kept in bed, thus reducing the demand on the weight carrying function of the spine. This, and the psychological influence of trying a new plan under optimistic circumstances, served to reduce the number and complexity of symptoms, but in no wise changed the character, or viciousness, of the reactions arising from any disturbance of the articulation between the **sixth and seventh cervical vertebrae**." (*Principles* of Osteopathy, 4th Edition, Dain L. Tasker, D.O., 1916)

"Pains Incident to Chill and Fever. - The headache, neckache, backache and legache of chill and fever are subjective symptoms prominent in a host of cases. These symptoms are of varying intensity but even when not complained of, a tenderness in the neck and back is readily elicited by digital pressure. As the fever subsides these areas of sensitiveness to pressure grow less and less, showing that their great extent in the beginning is a constitutional condition. It is readily recognized that our spinal lesion in pulmonary tuberculosis has changed with each phase of the disease. This is probably true of all diseases, hence there is no fixed lesion associated with any visceral or somatic disease. A slightly varying set of reactions accompanies each disease process. These reactions are usually true to type but not capable of classification except in a general way. The organs of the body are innervated from fairly definite areas of the cord and we speak of these as nerve centers, but as before stated these centers consist of cells placed vertically and extending through several segments. The spinal lesions found in visceral disease are hence pleuri-segmental and, if there is toxemia, there is a set of lesions expressive of this condition superimposed on the first, then, in case of destruction of tissue, compensatory changes in structure are noticeable. The three major forms of integration are involved in any severe illness and hence the diagnostician must try to separate the various evidences of the body's protective reactions. The greater variation will be in those symptoms due to circulatory integration. This is evidenced by the rapid changes in cases of autointoxication. The lesion which is characterized by its, persistence will be located in that seg-ment or segments most closely allied with the center of visceral disturbance. The lesion of still more permanence will be the primarily traumatic or secondarily compensatory." (Principles of Osteopathy, 4th Edition, Dain L. Tasker, D.O., 1916)

"Headache. - Since sympathetic branches are distributed to the blood vessels of the pia mater, we may reasonably expect to affect the caliber of these vessels in the case of congestive headache, by removing all obstructions, e.g., contracted muscles causing dilatation to the active functioning of the **superior cervical ganglion**. The distribution of these sympathetic nerves to the orbit, nose, pharynx, tonsils, palate and sinuses, explains the possibility - yes, probability of a **mechanical lesion in the upper cervical region in these cases**." (*Principles of Osteopathy*, 4th Edition, Dain L. Tasker, D.O., 1916)

"A large number of sensory impressions reaching the vasomotor centers over the sensory nerves of the skin usually result **in vasoconstriction of cutaneous blood vessels, hence internal congestion**. Irritation of the sensory nerves in the skin may cause muscle under the skin to contract, thus obstructing the circulation in the skin. **Therefore, our manipulations for vasomotor effects naturally divide themselves into two classes. First, those which inhibit**

cutaneous reflexes; second, those which relax muscle in order to remove obstructions. This division is purely arbitrary on our part, but it serves to explain our work. We purposely leave out of this discussion the thought that we may have an osseous lesion causing our vasomotor disturbance. We divide the spine into areas according to the predominating influence which issues from it; thus, the suboccipital fossa is the first important area. It has long been known that pressure applied to this area in a case of congestive headache gives great relief. The good effects are not lost when the pressure is removed. This proves that the effect of the pressure is on the nerves of that area, and that they are in close central connection with the vasomotor center in the medulla. This center regulates the caliber of the arteries all over the body. It has been stated that pressure at the basi-occiput retards the blood flow to the brain, the pressure being on the vertebral arteries. We believe a careful examination of the atlas will convince one that in the average skeleton the groove for the vertebral artery is so deep and well protected that pressure on the surface of the neck cannot affect the artery. If our pressure effect is mechanical, why does the effect last so long? The blood stream is as swift as an ocean greyhound, and would rush into the partly filled vessel with its previous force just the moment the pressure is removed. We can only explain the result by noting the fact that a change has been made in the entire circulation. Downward pressure on the carotids is also recommended to retard the blood flow to the head. This seems impracticable since the pressure cannot help affecting the venous return as well as the carotid stream. The best and most lasting effects are always vasomotor." (Principles of Osteopathy, 4th Edition, Dain L. Tasker, D.O., 1916)

"The next great constrictor area is the splanchnic, sixth to eleventh dorsal. This and the preceding area are the two points of vantage for the osteopath. Since the splanchnic nerves control a system of blood vessels whose combined capacity is equal to the entire amount of the blood in the body, we can quickly realize what it means to the general circulation to affect this area. In all cases of **congestive headaches**, fever, hyperaemia of visceral organs, etc., we "inhibit the splanchnics." Why? The reflexes between the skin of the back and the muscles of the back are so intense that they cause vascular constriction of the cutaneous arteries and contraction of the deep muscles of the back, thus adding a mechanical obstruction to the circulation of the blood, in an already constricted area. Is it not possible, yes, probable, that this **state of the surface tissue causes a congestion of the vasomotor centers in the dorsal area of the cord, thus nullifying their control of the splanchnic area**? Such a condition might be brought about by cold. The eating of indigestible food which remains a long time in the **digestive tract may also be a cause**." (*Principles of Osteopathy*, 4th Edition, Dain L. Tasker, D.O., 1916)

"At this point it will be proper to suppose a case by way of illustration. Suppose by some accident the bones of the neck should be thrown at variance from the normal to a bend or twist. We may then expect inharmony in the **circulation of the blood to the head** and face with all the organs and glands above the neck. We will find imperfect supply of blood and other fluids to the head. We may expect **swelling of head and face with local or general misery**. Thus you have a cause for **headache**, dizziness, blindness, enlarged tonsils, sore tongue, loss of sight, hearing, memory, and on through the list of head diseases, all because **of perverted circulation**

of the fluids of the brain proper of any local division. It is important to have perfect drainage, for without it, the good results from a treatment cannot be expected to follow your efforts to relieve diseases above the neck." (*Philosophy of Osteopathy*, Andrew Taylor Still, D.O., 1899)

"Osteopaths well understand how to produce either stimulation or inhibition of the ganglia by way of the nerves passing to them from the spinal cord, and the results of such inhibition or stimulation in any sympathetic area can be prophesied readily by anyone who has read with attention what I have written; for instance, in the case of inhibition in the region of the nerves supplying the superior cervical ganglion with nerve force, we will find, first, throughout the area of distribution of the branches of this ganglion a relaxation of the vascular walls. This will be marked by two indications, first, the skin will become flushed and moist; second salivary secretion and lachrymal secretion will be increased. Second, the vagus is now allowed full sway, and we will find slowing of the heart-beat. It is well known that pressure over the seat of the first spinal nerve for a very brief period of time will control a congestive headache; the pressure in such case is made only for so long time as to produce stimulation of the sympathetic to greater activity, when we will attain a vaso-constrictor action, lessen the volume of blood in the cranial cavity and so abolish the headache. The arteries of the body may be divided into three groups, the large, the medium-sized and the small; in the first of these we find little muscular tissue and much elastic; in the second they exist in about equal proportions, while in the small arteries we find much muscular tissue and little elastic. As a consequence it is upon the smaller arteries that the sympathetic system has its greatest effect. As we dilate the smaller arteries and slow the heart action, it follows that we reduce the blood pressure, as we reduce blood pressure we reduce temperature, and within a very few minutes after the commencement of this inhibitory pressure on the upper four cervical nerves we will find in the large majority of cases, the capillaries over the entire surface of the body flushed, this being accompanied by a fall in the pulse rate and a marked diminution of the temperature." (Philosophy of Osteopathy, Andrew Taylor Still, D.O., 1899)

"**NERVOUS HEADACHE** may often be benefited by vibratory stroking as it has a sedative effect on cutaneous nerves.

"MIGRAINE, OR HEMICRANIA is caused [Sajous. The Internal Secretions and the Principles of Medicine, page 1522] by "toxic wastes" (Sajous thinks probably the purin group) stimulating the sympathetic center thereby causing general constriction of the arterioles, except those which cannot contract; because their walls are functionally or organically weak. When the sympathetic system alone is stimulated, there results a contraction of all the other arterioles of the body except those of the affected region causing "pressure and hyperaemia of the local nervi nervorum. "A second form of migraine, the vaso-motor form, is due to sympathetic irritation plus stimulation of the vaso-motor center, resulting in a general vaso-constriction except in the "diseased or lax" arterioles which are dilated. It is like the first form, only aggravated. The blood pressure is raised, and there is pupillary contraction. Migraine may be caused directly or reflexly by overeating, improper diet, uterine disorders, or excessive muscular fatigue, carious teeth, eye-strain, nasal or ophthalmic affections or adenoids.

"The treatment should be directed according to Snow, to '(1) improving the general nutrition, (2) to lessening the nervous irritability by restoring or establishing a proper stability of the nervous system, (3) to correcting or removing exciting causes, as far as possible, which induce attacks, and (4) to relieving the attacks when they do occur.'

"The first indication calls for colonic flushings or saline purgatives; light, light baths, or hot air baths to promote elimination, outdoor exercise, and dietary restrictions as; water freely, milk, koumiss, zoolak, cooked fruit and vegetables - a meat free diet, no eggs, coffee, tea, or stimulants.

"The second may be successfully managed by local or general vibratory treatment, with other physical measures as d'Arsonvalization if necessary, depending upon indications. The stroke, speed and pressure exerted should be adapted in every case to the condition of the patient. Above all, no pain must be caused by the treatment. A soothing effect is to be sought. Vibratory stroking from before backward and from the occiput down and outward and over the neck anteriorly with a rubber-covered disc, and interrupted vibration with moderate or deep pressure over the painful areas, is sometimes useful. Kellogg believes that sometimes there are "points of induration or thickening in the trapezium and scaleni muscles "which seem to have some relation to some attacks of migraine. Such cases should receive indicated local treatment with the disc vibratode. Vibratory treatment of the liver and abdomen, which will improve digestion, associated with a restricted diet, are often indicated, as well as applications of proper spinal vibration with the ball to meet conditions, Cyriax [The Elements of Kellgren's Manual Treatment, page 161] believes that the 2nd cervical nerves seem to have fibres supplying the head and uses frictions on the nerves to relieve congestive headaches with good results frequently. He says such frictions have an antipyretic effect. The posterior roots [The Elements of Kellgren's Manual Treatment, page 160] are "posteriorly near the middle line as they emerge from the trapezium " and the anterior roots are "more externally and anteriorly under cover of, and in front of that muscle. " The vibratode should be placed over the site of these branches and the frictions should be from "before backwards" to the vertebral exit of these nerves. Cyriax [The Elements of Kellgren's Manual Treatment, page 456] also remarks in regard to CHRONIC HEADACHE, that although it is supposed that myositis of the neck muscles may be a cause, and massage of the neck muscles gives good results in this trouble, he believes that the muscular condition is secondary, "due to a primary nerve irritation" and says "much quicker results can be obtained by nerve vibrations.

"He uses [The Elements of Kellgren's Manual Treatment, page 220]for "fevers or chronic headache from hyperaemia cerebri to soothe and reduce cerebral excitement,"

1. Head lifting.

2. Vibrates or works on those parts of the head demanding special attention.

3. Nerve frictions, general and also local if required.

4. Repeats head lifting.

"The commonest form of this type of head exercise is as follows:

"One hand administers

Double supraorbital nerve fiction or vibration, or frontal vibration.

Coronal suture vibration.

Sagittal suture Vibration.

Double parietal vibration.

"The other hand administers

Double great occipital nerve (emerges through trapezium muscle and

runs upwards and outwards in the scalp) friction.

Double second cervical nerve friction.

Occipital suction movement.

Occipital vibration movement.

"Mechanical vibration may be given with the cup-shaped rubber vibratode, shortest stroke, medium rate of speed and little or no pressure over the indicated sites. It should be given for five minutes or longer.

"To meet the third requirement, pelvic treatment per rectum with the static wave current and correction of constipation are often indicated.

"The fourth requirement usually calls for **high colonic flushings** and local treatment as conditions are presented. In the **vaso-motor form**, intervertebral mechanical vibration with the ball vibratode between the transverse processes of the **2nd and 3rd dorsal vertebrae** as indications demand for five or ten minutes with intervals of rest or d'Arsonvalization to lower blood pressure correct the arterial tension. Vibration between the 3rd and 4th dorsal vertebrae for three or five minutes dilates the pupil." (*Mechanical Vibration*, M. L. H. Arnold Snow, M.D., 1912)

"By VIBRATORY STROKING is designated lightly touching a part of the body with a vibratode and at the same time moving it over the surface in indicated directions.

"When about to apply vibratory stroking the operator should test the speed, rate, and stroke by placing the vibratode on the side of his own cheek or forehead and lightly stroking the parts. When it produces a soothing, agreeable sensation the conditions will be right for making an administration. The stroke should be as short as possible, the speed fairly rapid, but not so rapid as to produce stimulation. For this form of administration a soft rubber vibratode, particularly the rubber covered disc or soft rubber cup shaped vibratode is preferable. The writer has applied it very successfully in **the treatment of headache**, and has noted that in this condition the stroke should be made rather slowly and with a very careful touch. It may be applied many times over the same place, the effects sought determining the duration. The touch should be very light in order that a sense of friction is not produced a soothing effect being desired. It may also be applied for reflex effects to areas of the skin, stimulation of which, by massage, was first advocated by Kellogg for the purpose of reflexly stimulating the spinal centers with the object of affecting not only the muscles, but the internal organs as well, and also to increase secretary, excretory and vascular activity." (*Mechanical Vibration*, M. L. H. Arnold Snow, M.D., 1912)

"Headache may sometimes be relieved by the application of vibratory friction of the spine, thus affecting the vaso-motors. Pelvic pain may often be relieved by applying vibratory friction over the lumbar and sacral regions." (*Mechanical Vibration*, M. L. H. Arnold Snow, M.D., 1912)

"**Pelvic headaches** according to Garrigues [Abrams. Spondylotherapy, page 89] may cause pain "(1) at the 4th and 5th lumbar vertebrae, the spinal-center for the internal pelvic organs, or (2) on either side of the 2nd sacral vertebra due to a cellulitis of the utero-sacral

ligaments. "Pain [Abrams. Spondylotherapy, page 99] from the sacrum to the **3rd dorsal** vertebra without limitation of spinal movement will indicate that the **lumbo-dorsalis** fascia is affected." (*Mechanical Vibration*, M. L. H. Arnold Snow, M.D., 1912)

"IN CHRONIC MYOSITIS characterized by indurations within the bodies of the muscles, causing pains in the neck, and interference with motion, circulation, and innervation associated with **indurative headache**, Abrams [Spondylotherapy, page 90] effects a cure with vibration and galvano-therapy although he prefers massage. The author uses prolonged vibration with the disc vibratode with few interruptions over the sites for five minutes at a time. Interrupted vibration is then given over the muscles affected. With the ball vibratode, interrupted vibration is applied over the segment or segments representing the muscles, or over the sites of the vertebral exits of the nerves supplying them, in each case the ball being placed between the transverse processes of the vertebrae." (*Mechanical Vibration*, M. L. H. Arnold Snow, M.D., 1912)

"The theory of disease at the menopause must rest on the unbalancing of the nervous system by changing the old established nerve channel through which they have carried impulses for a generation. It must rest on actually diseased genitals, or atrophy of the organs on the plexuses which transmit controlling forces to them. Disease at the menopause must rest on some irritating center, which is chiefly the genitals and their nerves. Like many old gynecologists, we need not look for the sole cause in the ovaries, but the trouble is due to reflex irritation. Eighty per cent of such women suffer in general from nervous irritability. Fifty per cent. have disturbance in the heat and circulatory centers. Probably fifty per cent. suffer deranged sensations, hyperesthesia and anesthesia. **Perhaps forty per cent. of women at the menopause suffer from the headache**, abdominal pain and perspiration. About twenty-five per cent. of women at the menopause suffer from leucorrhea, sudden flooding and sweats. This means that all the secretary apparatus of the skin, mucous membrane and centers are deranged. The first thing to suspect in such patients is deceased genitals. Endometritis is an arch fiend at this period in a woman's menstrual life." (*The Abdominal and Pelvic Brain*, Byron Robinson, MD, 1907)

"The general view here entertained in regard to constipation and neurosis is: That **the constipation is the cause of nervous symptoms, e. g., a person suffers for several days from constipation and light cerebral symptoms arise, as headache, dizziness, pressure in the head** and inability to think well. There may be feelings of heat in the head and considerable general languor. The urine may be a little scanty and high-colored, with hot and dry skin. There is often slight respiratory disturbance. Physicians generally attempt to prove that all these cerebral symptoms depend on the several days of constipation, from the fact that after a brisk cathartic the cerebral symptoms disappear. This circle may be, and often is, repeated in the same individual.

"At first sight this explanation, with its practical demonstration, seems very laudable. But is it satisfactory? **Can not the neurosis, the subjective light cerebral symptoms, be the cause of constipation**? It is not easy to give a categorical proof of this. The disturbance, or

hindrance, in respiration and circulation may find an explanation in the elevation of the diaphragm.

"The **cerebral circulation may be disturbed by the reflex irritation of the abdominal viscera**, transmitting the irritation by way of the lateral chain of the sympathetic and the splanchnics. **Leube has recently reported cases where the person became dizzy from pressure in the rectum, either by fecal masses, or by the finger**. Here the dizziness arises from irritation of the hemorrhoidal plexus of nerves." (*The Abdominal and Pelvic Brain*, Byron Robinson, MD, 1907)

"The complex symptoms of **constipation** may be indecisively divided into general and local symptoms. The general and most disastrous symptom is that of **auto-intoxication**. It represents a series of manifestations in the territory of the nervous system, whether it be chronic or acute, common symptoms or **headache**, dizziness and neuralgias about the abdomen, as well as sleepiness, melancholia, languor, a feeling of debility and nausea. Pick says the visible expression of the constipation is the richness of excretory principals in the urine, and the increased toxicity of the same." (*The Abdominal and Pelvic Brain*, Byron Robinson, MD, 1907)

"Since pathologic physiology is the zone between physiology and pathologic anatomy it should be practically amenable to treatment. First and foremost the diagnosis should be made, and the cause removed, as ureteral calculus, anal fissure, hepatic calculus or any point of general visceral irritation. The most general essential feature of a subject suffering from pathologic physiology of the tractus urinarius is deficient visceral drainage. **The blood is excessively waste laden from elimination.** The secretions are scanty. The urine is concentrated, its crystallized salts are evident to the eye. The skin is dry from insufficient perspiration, sleep is defective from bathing of the innumerable ganglia with waste laden blood. Constipation, deficient urine, limited perspiration, capricious appetite, insomnia and **headache** characterize subjects with pathologic physiology of the tractus urinarius." (*The Abdominal and Pelvic Brain*, Byron Robinson, MD, 1907)

"The tractus intestinalis is affected chiefly by: (a), compromising of circulation, blood and lymph supply, i. e., congestion and decongestion, (b) trauma of nerve centers, strands and nerve periphery, (c) complication from loss of peristalsis and atony of bowel muscle, (d) **gastrointestinal catarrh** and indigestion from excessive, deficient and disproportionate secretions, absorptions. Also **dragging on the abdominal brain, an independent nerve center producing nausea, neurosis, headache, reflexes**, and deranges secretion and motion on other viscera. (e) Dilatation of the stomach and duodenum, caused by the superior mesenteric artery, vein and nerve, obstructing the duodenum at this point where they cross the transverse segment. The **stomach is especially liable to dilatation from the above causes, where the prolapse of the enteron (enteroptosia) is sufficiently advanced to allow the enteronic loops to pass distalward into the lesser pelvis and particularly when the subject lies on the back, for then the superior mesenteric artery, vein and nerve are put on a stretch and they constrict vigorously the transverse portion of the duodenum. (f) The enteronic loops being dislocated (enteroptosia) into the pelvis, peristalsis, absorption secretion, circulation and nerve periphery**

are compromised, followed by catarrh, constipation and indigestion. (g) The colon, especially the colon transversum, may lie in the lesser pelvis, producing similar compromising circumstances as in the enteron. (h) The appendages (liver, pancreas, and spleen) of the tractus intestinalis, in ptosis are compromised in circulation, secretion, absorption, peristalsis and nerve periphery." (*The Abdominal and Pelvic Brain*, Byron Robinson, MD, 1907)

"Tension of the visceral vessels in splanchnoptosia limits their lumen and consequently more vigorous heart action is required to force the blood to the viscera - taxing the heart's power, ending in anaemia, congestion, throbbings, **headaches**, dizziness. With loss of the controlling influence of the abdominal wall on the visceral circulation a fullness of feeling or weight in the abdomen may occur from visceral congestion and continuous congestion may lead to relaxation of visceral supports occurring in splanchnoptosia." (*The Abdominal and Pelvic Brain*, Byron Robinson, MD, 1907)

"In constant or periodic headache, lesion may be found either in cervical, upper dorsal or in lumbar regions. It may be associated as a result with various conditions. To make the cure permanent these conditions must he corrected. The usual treatment is to thoroughly relax the tissues of the neck and of the upper dorsal region. Raise the clavicles, secure free drainage for the brain through the jugular veins by working downward from jugular foramina with thumbs following line of veins. Quiet the heartbeat by steady pressure on the annulus. Steady pressure over the points of emergence of the fifth nerve will often stop the pain anteriorly, while pressure on the sub- and great occipital nerves will stop a posterior pain. Firmly holding the sub-occipital region and throwing the head backward will stop the flow from the vertebral arteries and at the same time facilitate drainage. Press gently on solar plexus; give thorough relaxation in the splanchnic region." (*A Manual of Osteopathic Manipulations and Treatment*, Wilfred L. Riggs, D.O., 1901)

"HEMICRANIA - SICK HEADACHE - MIGRAINE

"Reduce the heart action by freeing the ribs on the left side and holding the inferior cervical ganglia. Should there be nausea, it is relieved by elevating and separating the third to fifth rib on the right side. Look for cervical lesions as well as in other regions. The treatment is similar to that for headache, q. v." (*A Manual of Osteopathic Manipulations and Treatment*, Wilfred L. Riggs, D.O., 1901)

"7 B. The sub-occipital, great occipital, small occipital, and great auricular nerves may be stimulated as in cases of fever, headaches, etc., by deep pressure on both sides of the spine, just at the base of the skull, as in Figs. 8 and 9. The founder of Osteopathy, Dr. A. T. Still, when but a small boy, made pressure on these nerves by placing his head in a swing. See Fig. 10. He found that this pressure relieved his headache. This accidental discovery may have had something to do with his discovery, later in life, of Osteopathy....

"14. While the patient is lying on the back the palms of the operator's hands are passed from the center of the forehead each way, with varying pressure down over the temples and

behind the ears. This movement has a quieting effect on the patient, soothing the nerves, and is **frequently used in headaches**. It affects branches of the fifth nerve on the forehead. See Fig. 20.

"15. One palm is placed across the forehead and the other beneath the skull, or both palms may be placed on the forehead, one on top of the other, and great pressure exerted for a few seconds and repeated several times. See Fig. 21. This is useful in colds, **headache**, etc., as it helps to relieve the pressure in the longitudinal and lateral sinuses, large veins of the brain....

"17. We may tap with the knuckles or percuss with one finger laid upon the center of the forehead in treating **headaches**, colds, etc.

"18. Manipulate on each side of the nose and loosen all the tissues for the purpose of affecting the fifth nerve and freeing structures in close connection with it. See Fig. 23.

"19. Use deep pressure, with a gliding movement of the little finger, to work over a portion of the **fifth nerve**, supplying the tear duct, for the purpose of opening it or keeping it open. Begin at the inner corner of the eye. See Fig 24.

"20. The forefinger will find a little depression in the skull, just below the eyebrows, between the center and inner margins of the eye, where the supraorbital branch of the **fifth nerve** emerges from the skull. It is a nerve of nutrition to the eye, and passes outward over the forehead at an angle of forty-five degrees. Free the tissues about and in this little opening with a gentle, pressing, **circular movement of the tip of the forefinger**. See Fig. 25. Work along the nerve with the palm of the thumb. In some cases of neuralgia it will be found to be extremely sensitive, which will be greatly lessened as tissues are relaxed about it. In treating the eyes this nerve is often stimulated. The nerve may be felt beneath the skin.

"21. The **fifth nerve** may be treated where it emerges from the skull above the eye, in Figs. 25 and 20. Also over both jaws, above and below the roots of the teeth. It may also be treated below the malar cheek bones, as in Fig. 26. It may be treated along the sides of the nose, as in Fig. 23. Thorough treatment of this nerve is frequently necessary in cases of neuralgia." (*Practice of Osteopathy*, Charles H. Murray, D.O., 1925)

"SICK HEADACHE. (Migraine, Hemicrania, Cephalgia.)

"Migraine is an intense headache, occurring frequently, with or without disturbances of vision or of nausea. Medical writers as a general rule claim that no lesions have been discovered, but **Osteopaths frequently find neck lesions, also upper dorsal lesions**, the removal of which has resulted in cures.

"The patient can tell for some time previous when an attack is to be expected, by the sensations and symptoms peculiar to each given case. The pain at the beginning of an attack is on both sides of the head, but after awhile it localizes on one side. With some patients the attack localizes on one side at one time; at the next time it localizes on the other side. Some cases continue from childhood to old age.

"Most of the lesions have been found in the **neck and upper dorsal region, though some have been found in the lower dorsal and lumbar regions. Stomach troubles, uterine misplacements, eye strain, and tumors are sometimes responsible.** These causes must have special treatment.

"Treatment. The neck must be thoroughly manipulated. See Nos. 1, 3, 5, 7, 9, 10, 11, 13. All spinal muscles and tissues should be relaxed. Nos. 4, 43, 48, 53. The abdomen should receive a deep inhibitive treatment. Nos. 94 to 99. Give heavy pressure over the solar plexus.

No. 100. Misplaced vertebrae and ribs should be corrected. Tissues over the nerves in the face should be relaxed. Nos. 14, 20,21. Work vigorously and deeply with thumb and finger on a line straight over the head, from the nose to the base of the skull at the back of the neck. See No. 16. Give heavy pressure on the skull. No. 15. Give heavy deep treatment at the base of the skull, on each side of the spine. This may be temporarily painful, but will be effective. No. 7B. Pressure may be given in the upper dorsal region. No. 67. The clavicles should be raised. Nos. 72, 73.

"The treatment should be given deliberately, and is probably the longest that the Osteopath gives. Great relief should be given during the first treatment. A very general treatment will be helpful. See general treatment. Give particular attention to the stomach and bowels. The patient should avoid overexertion, as becoming tired acts as an exciting cause. A hot mustard foot-bath, heat at the base of the skull, and an ice bag on the forehead is often helpful. Should there be nausea, use the ice bag on the spine from the fourth dorsal down to the first lumbar vertebra. Some patients are helped by a cup of strong, clear coffee.

"The drug treatment for this condition is very unsatisfactory. Headache powders, pills and the various pain killers are dangerous. The extract of cannabis indica is sometimes given for a long time, two or three times per day, in doses of a fourth to a third of a grain in hope of curing the condition. At the time of the attack the following pills are sometimes given:

Acetanilid 20 grains.

Codein Sulphate 5 grains.

Camphor monobromate 5 grains.

"Make of this ten pills and take one every two hours until relieved. The heart action should be watched when using these pills. Menthol pencils are used locally for the purpose of relieving the pain. Rub them over the seat of the pain." (*Practice of Osteopathy*, Charles H. Murray, D.O., 1925)

"Celsus, the most eminent of all Roman physicians, who lived at the beginning of the present era, was very familiar with massage, and used great discretion in its application. He recommended manipulations of the head for the relief of headache, and general manipulations to restore the surface circulation in fever, making this wise remark: " A patient is in a bad state when the exterior of the body is cold, the interior hot with thirst; but, indeed, also, the only safeguard lies in rubbing." Galen, the greatest physician of his time, in the second century recommended massage in many diseases. He seems to have had a good understanding of the various forms of friction and kneading." (*The Art of Massage*, J. H. Kellogg, M.D., 1895)

"The various forms of headache are in a high degree amenable to treatment by general and local applications of massage, especially the **different forms of headache from which neurasthenic and anaemic individuals so commonly suffer**." (*The Art of Massage*, J. H. Kellogg, M.D., 1895)

"Physiological Effects and Therapeutic Applications. - **The effect of pressure is to diminish swelling and congestion, and thus to relieve pain. Violent headache or pain in a joint may often be relieved in this way**. A person suffering from severe toothache involuntarily makes firm pressure against the painful part. Pressure relieves pain, doubtless both by emptying

the blood vessels and by benumbing the nerves." (*The Art of Massage*, J. H. Kellogg, M.D., 1895)

"Stroking may also be employed advantageously after other procedures in massage, for the purpose of lessening an excessive degree of cutaneous congestion or stimulation which may have been produced. It is especially useful for this purpose when applied about a joint. It is also of value as a means for relieving hypersensitiveness, even when accompanied with inflammation. Certain forms of **nervous headache may frequently be controlled in a most decided manner by gentle stroking of the head.**" (*The Art of Massage*, J. H. Kellogg, M.D., 1895)

"Pelvic pain may often be alleviated by friction of the lower part of the back. **Headache may be relieved by friction of the spine**. Cerebral congestion, and the insomnia resulting from it, may often be relieved by centrifugal friction applied to the extremities. The rubbing should be in a direction away from the heart, thus impeding the flow of venous blood and so retaining a considerable amount of blood in the lower extremities, and thereby affording relief to the congested brain." (*The Art of Massage*, J. H. Kellogg, M.D., 1895)

"In cerebral congestion the rubbing should always be downward. In anaemia of the brain, rub upward." (*The Art of Massage*, J. H. Kellogg, M.D., 1895)

"CHRONIC NASAL CATARRH -- RHINITIS, ACUTE AND CHRONIC

"DEFINITION: Acute Nasal Catarrh is an inflammation of the nasal mucous membranes, accompanied by an increased secretion of mucous and by various general symptoms, and is caused by specific lesions, in the cervical region chiefly, which may be secondary to contractures of muscles and soft tissues by exposure. After repeated attacks the disease becomes chronic, upon account of the confirmed condition of the lesions.

"A "cold in the head" is an acute attack of this disease. Yet "colds" may settle in any part of the body, as a rule, in "the weakest part," and then probably assume the form of congestion instead of inflammation as in the case of coryza. Its manifestations are various, one of the chief ones being the **disturbed vaso-motor reflex of the body**. These weak places liable to such congestion are commonly due to lesion of the part, which acts to deteriorate its vitality and lessen its resistance power.

"CASES: (1) A very severe and distressing cold, to sudden attacks of which the patient was subject. They came on suddenly, lasted nearly a week, and then gradually disappeared. Marked coryza, lachrymation, and sneezing continually, were features of the case. It stimulated hay-fever very closely. Upon treatment the sneezing stopped almost immediately. **Treatment was to the vaso-motor control of general circulation, to the pulmonary circulation, to relaxation of contractured muscles of cervical and upper dorsal regions, and to the circulation to the head**.

"(2) Sneezing and coryza, with all the common symptoms of "catching cold" were relieved at once by a treatment. Marked lesion was present at the 2nd cervical vertebra.

"(3) Intense nasal catarrh in a debilitated system suffering from a complication of diseases yielded at once to the treatment.

"After six week's treatment a cold contracted from exposure was well withstood.

"(4) A case of nasal catarrh in a debilitated system showing various spinal lesions was greatly relieved by three treatments, and was progressing satisfactorily under treatment.

"Very numerous cases, many of them in an aggravated condition come constantly under treatment. The author has treated several individuals who were subject to very severe colds, in whom one treatment invariably broke up the most severe attack.

"One case of chronic catarrh would, soon after a treatment, begin to spit out catarrhal concretions which had formed in the Eustachian tubes.

"CAUSES: The specific lesions causing such disease are, as a rule, high up in the cervical region, effecting especially the 1st to 3rd cervical vertebrae, but they may occur as low as the sixth dorsal. One of the chief forms of lesion is that of contracture of the cervical muscles and deep, soft tissues. These contractures, due primarily to exposure, gradually act to warp, or draw, the cervical vertebrae and intervertebral discs out of shape and out of their normal anatomical relations. The result is obstruction to blood and nerve-supply, causing chronic catarrh. The deeper anatomical lesions due to contracture and to other causes as well, produce catarrh, and not some other disease, because of affecting certain areas of nerve connections and certain centers. Thus lesions of the upper three cervical vertebrae act upon the superior cervical ganglion, in ways already discussed, and distort the fifth nerve through its very intimate connections with the ganglion in question. In the same way, lesion to the inferior cervical upper dorsal bony parts may affect those sympathetic fibers (or the area of the cord giving origin to them) which ascend in the cervical sympathetic chain, finally to reach the fifth nerve, which thus supplies secretary fibers to the parts in question. The very numerous vaso-motor, secretory and trophic fibers for all parts of the head and face; for salivary glands, eye, car, tongue, face, mouth, etc., etc., passing to particular points of distribution through various of the cranial nerves, quite generally arise in the upper dorsal and cervical cord, having also numerous connections with the cervical sympathetics. This matter has been fully discussed in another place. (*See "Principles of Osteopathy" Lectures XVI-XVIII. [Publisher's Note: Not included in this database.]) This explains the importance of cervical and upper dorsal lesions. Thus lesions low down act upon the amending fibers of nerve-supply and affect a part much above, as in the case of dorsal lesion here.

"The fifth nerve bears special mention in these cases as the one concerned in the headache, lachrymation, sneezing, secretion of mucous, and inflammation of membranes. This nerve is also, in part concerned in the loss or alteration of the functions of taste and smell, caused by pressure of the injected membranes upon the fine nerve terminals.

"The PROGNOSIS is good for all forms of the disease. In acute cases it is particularly so, as one or a few treatments usually end the symptoms. In chronic catarrh good results are generally easily attained, and many times a cure is effected. In favorable climates do much to prevent cure as the patient is constantly exposed, hence the best results are attained in the favorable seasons of the year.

"The EXAMINATION AND TREATMENT for the specific lesion is made according to directions in Chaps. I to VII. The specific lesion should be treated, and removed at once if possible. This applies to both acute and chronic cases. In acute cases one of the first steps is to relax all the upper dorsal and cervical tissues. A thorough spinal treatment tones all the vaso-constrictors (2nd dorsal to 2nd lumbar), and all the vaso-dilators (all along the spine), thus aiding to equalize circulation, and reduce congestion of parts concerned.

"This effect is aided in an important way by raising all the ribs, and particularly by treating all the 2nd to 7th dorsal region on both sides, in this way increasing the activities of

heart and lungs. The anterior thoracic region is treated to relax tissues and replace ribs; the clavicle is raised, and separated from the first rib to relax the deep anterior cervical tissues, to free circulation through the carotid arteries and jugular veins, and to **free the pneumogastric nerves**. All the cervical muscles are thoroughly relaxed, the ligaments released by deep treatments, and the vertebrae of the whole region manipulated. This frees the connections of the sympathetics, the venous flow from the head, and tones vaso-motion in the affected parts. It is an important step in remedying the congestion of the parts of the head. **Inhibitive treatment should be given the superior cervical ganglion to dilate blood-vessels and allow the congestion to be swept out.** The superior and inferior hyoid muscles are relaxed, and the work is carried down along the trachea to the root of the neck. The mouth is opened against resistance; the tissues beneath the angles of the jaws are relaxed. This releases the internal jugular veins, stimulates circulation through the carotid arteries, and corrects circulation. One of the most efficient measures for curing the congestion of the head, and to relieve the stoppage of the nostrils is the momentary pressure upon both internal jugular veins, before described, followed by heavy pressure with the palms of the hands upon the forehead.

"Particular attention is devoted to the treatment of the **fifth nerve** for reasons already given. It is reached at points upon the face already described, and all the tissues over them are relaxed. Treatment of this nerve thus directly is a most important adjunct to that given its sympathetic connections. It is most important as a means of relieving the inflammation, secretion, lachrymation, and stopping of the nostrils. Manipulation along the sides of the nose frees the nasal ducts and relieves the congestion; strong pressure upon the root of the nose and upon the forehead frees the nostrils; tipping over the frontal sinus relieves congestion and pain in it. The headache is relieved by the treatment in the general cervical, superior cervical, and frontal regions; the cough is relieved by the treatment along the trachea; the chilly feeling by the brisk spinal treatment. The soft palate may be treated by placing the finger gently upon it and sweeping it laterally across. This treatment may be carried well up toward the opening of the Eustachian tube. The congestion of these parts is thus relieved.

"The lungs must be kept well treated to prevent the cold from settling upon them. Precautions must be taken against the marked tendency of these congestions to move from part to part. This is done by keeping all well stimulated by the treatment. The bowels and kidneys are treated to keep their action free. The treatment about the lower jaw and to the carotid arteries is efficient in reaching the Eustachian tube, and in loosening the secretions that sometimes occlude it. Deep treatment under the angles of the jaws is good in ill forms of catarrh.

"In chronic cases the treatment is devoted more particularly to the removal of the specific lesion, and the building up of the blood-supply to the nasal membranes. As these are often atrophied or hypertrophied. (Atrophic or Hypertrophic Rhinitis, Ozena.) A long course of treatment is generally necessary to their rehabilitation. The principal treatment is directed to the cervical tissues, where chronic contracture of the muscles exists.

"Daily treatments in severe acute cases, and three per week in chronic cases, are usually sufficient. The patient should take care not to expose himself, but, on the other hand, should not keep the body tender and susceptible by dressing too warmly, sleeping under too many covers, or living in overheated quarters. One may contract a cold by going suddenly from an extremely hot to a very cold atmosphere, or vice versa. In all of these conditions it is important that the patient should not go out too soon after the treatment, as the system is relaxed and more cold may be contracted." (*The Practice and Applied Therapeutics of Osteopathy*, Charles Hazzard, D.O., 1905)

"MIGRAINE, (Hemicrania, Sick Headache) AND OTHER FORMS OF HEADACHE (Cephalagia)

"DEFINITION: Migraine is "a neurosis characterized by severe attacks of headache, often paroxysmal and more or less periodic, with or without nausea and vomiting." It is of obscure pathology; there seems to be nothing to connect it with lesion, and from an osteopathic point of view it is generally found to be due to cervical bony lesions.

"Headache is the general term used to describe pain in the head. It may be either symptomatic or idiopathic, the latter being generally chronic and due to specific bony lesion, usually in the cervical vertebrae. A large class of the latter come under osteopathic treatment, generally in a very bad condition after having suffered far beyond the power of drugs to cure. These may almost be considered as suffering from a hitherto undescribed form of headache, depending upon a specific lesion, often the result of accident, and usually immediately relieved and cured upon removal of the lesion. The form **embraces many of the kinds of** headache generally described under one or other of the usual classifications.

"CASES: (1) Extremely **severe frontal headache** in a man of thirty-two, since boyhood. He had taken every known remedy without avail. Lesions were found in muscular contractions on the right side of the neck; the dorsal spine was anterior in its upper half; the 11th dorsal vertebra was luxated to the left, the 2nd and 5th lumbar vertebra were prominent; the sacrum was tilted forward and the left innominate was slipped, lengthening the limb. The lesions were corrected and the case cured.

"(2) Migraine in a man of thirty, since his sixteenth year, when he fell from a wagon. Lesion existed at the 3rd cervical vertebra and at the atlas. The case was relieved at once and cured.

"(3) In a boy of twelve a very severe headache was caused by a fall on his head from a bar in the gymnasium. The atlas was found displaced laterally, and the case was cured.

"(4) In a chronic case of **occipital headache** persisting for years, no ordinary remedy would affect the condition. The atlas was found slipped and the muscles about it very much contracted and tender. Relief was given at one treatment, and the case was cured.

"(5) A man of forty-five, troubled for many years by **occipital headache**, mostly upon the left side. Lesion was found at the atlas, impinging upon a cervical nerve. Cure was accomplished in two months.

"(6) In a lady of thirty-three there was constant **occipito-frontal headache**. The eyes were weak and painful; the glasses had been changed six times in one year. The muscles of neck and shoulders were found much contracted, the atlas was luxated to the right and painful upon pressure. But one severe headache occurred during one month's treatment, and the eyes were much improved. In two months the glasses were laid aside and the headache was cured.

"(7) **Headache, with blind ' spells**, in a woman of forty-one; the 1st and 2nd cervical vertebrae were approximated and sore; the muscles of the upper cervical region very tense; headache constant; 1st to 8th dorsal vertebra were flattened anteriorly; 11th dorsal to 3rd lumbar posterior. The patient had suffered a sunstroke, and had had two or three, attacks monthly since.

"(8) **Congestive headache** in a man of thirty-seven, of twelve years standing. Violent attacks occurred daily and every known remedy had been used in vain. The sole lesions was a

depressed clavicle interfering with the venous flow from the head. Two treatments restored the bone to place and cured the case.

"(9) **Chronic headache of four years standing**, by a fall upon the back of the head, which rendered the neck partly stiff. There was contracture of the tissues over the spinous process of the axis, which was displaced to the right. After four treatments the pain had disappeared.

"(10) A lady had for many years suffered from agonizing headache, so severe at times as to render her unconscious. For some months the head had not ceased aching, day or night. Lesion was found as slight luxation of the 3rd and 4th dorsal vertebrae, and there was a well marked lesion at the 11th and 12th dorsal. The headache disappeared during one month of treatment, with no return after several months.

"(11) A case in which a woman suffered from intense headaches, there being also feeling of oppression at the base of the skull. The axis was lateral and anterior. The case was cured by adjustment of lesions.

"(12) A case of migraine, with chronic dysentery of five years standing, in a man of thirty-three. Lesion was a posterior condition of spine from 11th dorsal to 3rd lumbar. The treatment was directed to removal of lesion, curing the case.

"(13) Migraine of five years standing in a boy of sixteen. The 3rd cervical and 4th dorsal vertebrae were lateral to the right. Treatment was directed to removal of lesion, diet and exercise also being attended to. The case was benefited by one treatment, and apparently cured by three treatments. The course of treatment being continued once a week for two months.

One continually meets cases of severe chronic headache resulting from the use of drugs.

"LESIONS: Migraine, with other forms, shows the usual lesions. Lesions found to produce it are of the **atlas; 2nd and 3rd cervical, upper dorsal; 8th, 9th and 10th dorsal; 7th and 8th ribs**.

"When headache is symptomatic purely, lesion depends upon the primary disease, but specific lesion is often present and determines the effect in the head.

"Atlas, axis, cervical, and, to some extent, spinal lesions are the important ones producing headache. They result in chronic, idiopathic headaches. Often these may develop into insanity.

"Lesions act by disturbing sympathetic relations, reflexly causing the headaches, just as may be the case in reflex headache from uterine prolapsus. They all act by stoppage of blood flow. This may occur in several ways. The vertebral arteries may be occluded by pressure from the displaced cervical vertebra; the clavicle may hinder venous flow in the external and internal jugulars, the sympathetic irritation may set up vaso-motor reflexes and prevent proper circulation. A lesion may cause headache by direct pressure of the luxated vertebra upon a nerve fiber. A very common place for this to occur is at the atlas which impinges branches of the suboccipital nerve sent to supply the occipito-atlantal articulation. The same thing is apt to occur at any of the upper three cervical vertebra, the corresponding nerves sending branches to supply sensation to the scalp. Contraction of tissues over branches of the fifth nerve, or at their foramina of exit may cause headache. Reflexes or direct irritation of the fifth nerve may cause it.

"Lesion in the splanchnic area is often responsible for migraine.

"The kinds of pain in headache aid in diagnosing the variety. Dana notes the fact that a **pulsating or throbbing pain occurs in headache due to vaso-motor disturbance**, as in **migraine**; a **dull, heavy pain in toxic or dyspeptic forms**; a **constrictive, squeezing, or**

pressing pain in neurotic or neurasthenic cases; a hot, burning, or sore pain in rheumatic or anemic headache; a sharp, boring pain in hysteric, epileptic, or neurotic forms.

"The pain is usually found to be localized in or referred to the peripheral ends of the fifth nerve, they supplying the antero-lateral parts of the scalp and the dura mater with sensation. Hence treatment is directed to the branches of the **fifth nerve** upon the face and scalp. **The chief local treatment in occipital headache is made to the upper four cervical nerves**, as their branches are here involved.

"The PROGNOSIS is good in all cases of headache, even in migraine. The most long standing and severe cases yield readily to treatment, even when all other remedies have failed.

"The TREATMENT described will apply to any of the numerous kinds of headache described, though special portions of the treatment laid down may apply to any given case as sufficient for it. The treatment must be adapted to the case, each one needing a special study of its features to enable one to discover the cause and apply the proper treatment. The treatment, successful in one case may not apply to another.

"The lesion must be removed, and this often constitutes the sole treatment necessary. All causes of irritation must be removed, such as eye strain, sympathetic disturbance, uterine or stomach disease, etc. Ordinarily the first step is the relaxation on of contractured muscles in the neck and upper dorsal region. These muscular contractures may often be used as guides to locate bony lesion. Sometimes one small contractured fibre will lead the examiner to the seat of bony subluxation, if carefully followed. This relieves irritation to nerves, frees circulation and prepares for the replacing of a displaced vertebra. Attention should be given to freeing all points of venous flow from the head. Treatment may be made in the course of the veins across the forehead to the outer canthus of the eye and down toward the angle of the jaw, along the jugular veins, raising the clavicle and relaxing all the tissues.

"Inhibition along the back and sides of the neck in the region of the upper four vertebrae, and in the suboccipital fossae, quiets the upper four cervical nerves and aids in restoring equality of circulation through affect upon the superior cervical ganglion.

"Often pressure made as follows is sufficient: in the midline of the neck, just below the occiput; below the ears, upon and below the transverse process of the atlas; along the upper dorsal region at the upper three or four vertebra. These treatments quiet cerebrospinal nerves and correct vaso-motion.

"Treatment should be made upon the face over the points of the fifth nerve (Chap. V, B). Relax tissues over the nerves and at the foramina. Manipulation to relax the tissues all along the course of the longitudinal sinus, from nasion to occipital protuberance, and thence laterally toward the mastoid processes, over the course, of the lateral sinuses, aids in freeing the circulation in them. As this treatment is carried over the vertex the terminals of the various sensory nerves of the scalp are affected and quieted.

"Deep pressure over the solar plexus, and inhibitive abdominal treatment, aid in relieving the headache sometimes by quieting, the reflexes and calling the blood away from the head.

"Exciting causes should be avoided. It is well in such cases as need it to give attention to regulating the condition of stomach and bowels. Cold applied to the forehead and temples, and heat applied to the base of the skull and the extremities, aid in relief." (*The Practice and Applied Therapeutics of Osteopathy*, Charles Hazzard, D.O., 1905)

"(5) In a case of weak eyes, with pain in the neck, **occipital headache**, and a complication of troubles, lesions were found as anterior luxation of **3rd**, **4th**, **and 5th cervical vertebras**, the 5th being sore. The whole spinal column was stiff and stooped forward....

"(9) Extreme weakness of the eyes, together with female disease. A few minutes use of the eyes caused **violent headache**. Lesions were at the atlas and in a tilting of an innominate bone. The case was cured by removal of the lesions....

"(27) **Eyestrain, causing constant headache**, due to a luxated atlas. Glasses gave no relief. The headache did not recur after the first treatment, and the eyes were well after seven treatments. The case had been of but two or three months standing.

"The TREATMENT of eye diseases is necessarily almost entirely upon the neck, as it has been shown that the lesions in these cases occur here. The removal of the these various lesions is already understood from discussions in the previous pages. The treatment looks, in general to the establishment of perfect circulation, and the regulation of the nerve mechanism. The general neck treatment, as applied in cases of insomnia, headache, apoplexy, etc., q, v., given with a specific object in view, would be the method employed (see also Chap. III and IV)." (*The Practice and Applied Therapeutics of Osteopathy*, Charles Hazzard, D.O., 1905)

"For the Climacteric treatment is largely symptomatic, to relieve the **headache**, hot flashes, nervous disturbances, etc. A constitutional treatment is given, with special attention devoted to the spinal system, to strengthen the nervous system and to quiet nervousness. Local treatment to the uterus is not necessary unless local trouble exists. Care should be taken not to bring on the menstrual flow by hard treatment in the lumbar and sacral regions." (*The Practice and Applied Therapeutics of Osteopathy*, Charles Hazzard, D.O., 1905)

"Careful examination should be made for thickening of the tissues of the neck just below the occiput. Sometimes these tissues may be felt like a thick transverse band across the back of the neck just below the skull. Such a lesion is usually an indication of **intense congestive headaches**." (*The Practice and Applied Therapeutics of Osteopathy*, Charles Hazzard, D.O., 1905)

"THE FIFTH NERVE

"This nerve is reached at various points about the head, as it sends many branches out over the head and face. Its treatment is especially important in **headaches**, neuralgias, diseases of the eye, nose, etc., for the reason that it carries vaso-motor and trophic fibres to these parts.

"I. Its supra-orbital branch may be traced from the supra-orbital foramen out over the forehead to the temple. It forms an angle of about fifty degrees with the superciliary ridge. It may be felt under the skin like a fine whip-cord, and it may be manipulated along its course by passing the fingers transversely across it. Often one nerve is more plainly felt and often one is more tender, than its fellow. Though not invariably so, it is often noticed that the nerve which is seemingly slightly enlarged and more plainly felt is the one in abnormal condition.

"II. The infra-orbital and mental branches may be manipulated at their respective foramina. By clinching the fingers beneath the malar process several branches of the former may

be impinged. The tissues over the foramina and along the courses of all of these different branches should be thoroughly relaxed to remove irritation.

"III. A supra-trachlear branch is located slightly to the outer side of the midline of the forehead, a lachrymal branch about the middle of the upper eyelid, a temporal branch external to the outer canthus of the eye, an infra-trochlear branch upon the nose opposite the inner canthus, and a nasal branch at the lower third of the side of the nose.

"All are subcutaneous and are readily manipulated after knowing where to locate them." (*The Practice and Applied Therapeutics of Osteopathy*, Charles Hazzard, D.O., 1905)

"To stimulate the subsidiary centers of vaso-constriction, in a case where there is vasomotor competency, would **excite headache** and distress, and such an unprofessional mistake is apt to be made when concussion is administered empirically." (*Spondylotherapy Simplified*, Alva Emery Gregory, M.D., 1922)

"HEADACHE

"Treatment. We relieve **headache** instantly by spinal adjustment in practically every case, but we suggest the use of the sinusoidal current for the less progressive physicians who have not investigated spinal adjustment.

"Apply the electrode opposite the seventh cervical spine when there is an increased acidity of the blood.

"Apply the electrode opposite the eleventh dorsal spine for alkaline conditions.

"Continue treatment ten minutes and repeat the seances daily." (*Spondylotherapy Simplified*, Alva Emery Gregory, M.D., 1922)

"Cold in the Head or Catarrh

"An acute catarrhal inflammation of the mucous lining of the nose and cavities communicating with it.

"Causes: Atmospheric changes; exposure of the neck to draughts of cold air causing contraction of the muscles and hence interference with the free circulation of blood; exposure of the feet and ankles to cold and dampness; or changing from a warm to a cold atmosphere suddenly, are among the most usual causes.

"Symptoms: Weariness, or more or less **frontal headache**, chilly sensation in the back, followed by slight feverishness, soon followed by an abundant watery discharge from the nose and strong inclination to sneeze.

"Treatment: 1. With the patient lying on his back, give treatment of the neck Nos. 7, 8, 9, pages 30, 31, 32.

"2. Press on the forehead, treatment No. 6, page 29.

"3. Treatment No. 11, page 34.

"4. Treatment No. 10, page 33.

"5. Treatment No. 37, page 60.

"6. Treatment No. 17, page 40.

"The whole of this treatment should be given every day for a few days, after which it may be given three times a week, and should not take over fifteen minutes to apply. There will be a positive cure in one week if it be an acute attack, often in a shorter time.

"Diet: Should be very light; no breakfast and a light supper, with the principal meal in the middle of the day, will be found beneficial in connection with the osteopathic treatment. Avoid sweet foods and pastries.

"Baths: Take a warm full bath (No. 4, page 155) or a hot foot bath every night before retiring, and place a cold compress around the neck at night for a week, as described on page 58." (*A Manual of Osteopathy*, Eduard W. Goetz, D.O., 1909)

"Chronic Nasal Catarrh

"A chronic inflammation of the mucous membrane lining the nasal passages.

"Causes: The result of repeated attacks of the acute variety, or frequent colds in the head. "Symptoms: A feeling of fullness in the nose, increase of the discharge, "hawking,"

which is more marked in the morning after rising. The special sense of smelling and hearing areimpaired; the voice has a peculiar nasal intonation; an almost **constant frontal headache**.

"Treatment: Same as for cold in the head (page 73), given three times a week, but will require a longer time to cure; from a month to three.

"Diet: Should be nutritious and digestible. All fried foods must be avoided, as well as pastries and sweets.

"Exercises: Take long draughts of fresh air every day, breathing deeply through the nostrils." (*A Manual of Osteopathy*, Eduard W. Goetz, D.O., 1909)

"Headache

"There are perhaps few people who have escaped the ravages of a severe headache, and while there are several different causes, there is a leading one that makes it possible to cure the majority of them in one treatment and within a few minutes.

"Causes: Constipation, indigestion, uterine disorders and contraction of the muscles in the back of the neck are the causes that produce the chronic form, while the acute attack may be due to imperfect circulation to the head, or inactivity of the bowels; the presence of indigestible matter in the stomach or vitiated air.

"Treatment: 1. Simple pressure over the site of **the great occipital nerves, holding same for two or three minutes** (treatment No. 5, page 28), or **an injection of very warm water into the rectum, see page 156, will stop a mild headache**, and if chronic give:

"2. Treatment Nos. 7, 8, 9, pages 30, 31, 32.

"3. Treatment No. 16, page 39.

"4. If constipated give treatments Nos. 25, 26, 28, pages 48, 49, 51.

"5. Treatment No. 39, page 62.

"If the patient has **chronic constipation or irregular menstruation**, give treatment for same.

"6. **Terminate all headache treatments with Special Treatments** Nos. 5 and 39, pages 28 and 62.

"Treat three times a week for the chronic form, and have the patient breathe plenty of fresh air." (*A Manual of Osteopathy*, Eduard W. Goetz, D.O., 1909)

"Dyspepsia

"There are two varieties, acute and chronic. It is a catarrhal inflammation of the stomach. Causes: The acute form may be due to deficient quantity or quality of the gastric juice, errors in diet, insufficient mastication of food, swallowing liquids too hot or too cold, and the abuse of alcoholic liquors.

"The chronic form is caused by repeated attacks of the acute stage; excessive use of tobacco, tea, coffee, ice water, drank with the meals; malaria; disease of the heart, lungs, or liver.

Symptoms: At first there is a loss of appetite, bad taste and breath, persistent nausea and vomiting, **headache**, thirst, pain and tenderness in the pit of the stomach, feeling of weight, and belching, also dizziness.

"Treatment: 1. With the patient on his side, give treatment No. 20, page 43.

"2. Treatment of the liver and stomach Nos. 25 and 26, pages 48 and 49.

"3. With the patient on a chair, place the thumb of your left hand one inch to the right of the fourth dorsal vertebra and press hard, and at the same time with the disengaged hand raise the patient's right arm above the head and lower same again with a backward and downward movement. (See cut No. 17, page 40, for position, but the treatment must be given on the right side of patient. See cut No. 1 N, page 24, for location of the fourth dorsal vertebra.) Treat three times a week; one month to two will cure any case of indigestion or dyspepsia.

"Diet: Prescribe diet list No. 6, page 144, and avoid the different causes that may produce an attack.

"Baths: Take cold full bath No. 1, page 154, every night, with the water at a temperature of 85 degrees, and reduce the temperature at each succeeding bath one degree until down to 60 degrees.

"A cold compress applied to the abdomen, from a little above the pit of the stomach to the pubic bone and applied in a similar manner to the form of compress for the chest under the head of treatment for bronchitis, page 86.

"Exercise: The patient should have plenty of out-of-door exercise, short of fatigue." (*A Manual of Osteopathy*, Eduard W. Goetz, D.O., 1909)

"Constipation

"A functional inactivity of the intestinal canal due to the debility of the muscular coat, causing an obstructed flow of bile, or lessened natural propelling power of the intestines.

"Causes: Neglecting the calls of nature, dyspepsia, lead poisoning, syphilis, tipped uterus, or the coccyx pressing against the rectum.

"Symptoms: The bowels are moved every three or four days with great straining and distress, the face often flushed; or, in other cases, the bowels may move every day, but the stool is small and hard, causing great distress. It is soon followed by dyspepsia, **headache**, vertigo, palpitation of the heart on exertion, and sometimes distention of the abdomen.

"There is, perhaps, no other affliction so common as that of constipation, and medicines are not only merely temporary expedients to relieve the bowels of their contents, but will in time make the condition worse, so that a movement of the bowels is impossible without taking a purgative medicine.

"We all know what constipation is, yet the mere fact of the bowels not moving every day cannot be construed as constipation, for there are cases where the bowels empty themselves only every three or four days, and yet they move normally when the time comes.

"The following treatment will not only produce a natural movement, but will remove the cause.

"Treatment: In cases of periodical constipation, simply treatments Nos. 20 and 25, pages 43 and 48, and on the right side only, and treatments Nos. 28 and 29, pages 51 and 52, will have the desired effect. If the bowels do not move after twenty-four hours, then give in addition, the following day, treatments Nos. 7 and 8 pages 30 and 31. Dilation of rectum with the finger will assist.

"Give rectal douche, page 156. Ordinarily from one week to two months will cure any case of constipation. Treatments should be given three times a week.

"Diet: Prescribe diet list No. 3, page 142. if the case be a chronic one. Eat slowly and masticate food properly.

"Baths: Take warm full baths No. 4, page 155, three times a week, or a hot sitz bath No. 2. Page 154, with the temperature of the water at 95 degrees, three times a week.

"Exercise: The following exercises should be taken every morning for about five minutes: With the hand above the head, bend forward, endeavoring to touch the floor with the fingers without bending the knees, having first taken a long breath and holding same during the time that you bend over eight or ten times. Now with the hands on the hips, bend forward and backward at the waist line, while holding the breath, and then move the upper part of the body in a circular motion. Take plenty of exercise out of doors." (*A Manual of Osteopathy*, Eduard W. Goetz, D.O., 1909)

"Biliousness

"An abnormal fullness of the vessels of the liver, with consequent enlargement of that organ. The condition is characterized by sluggish digestion, sluggish mental functions, and jaundice.

"Causes: Heat, atmospheric or artificial; habitual constipation; malaria; excess in eating and drinking; alcoholic or malt liquors.

In females an arrested menstrual period may bring on an attack; heart and lung diseases.

"Symptoms: Uneasiness or aching of the limbs, evening feverishness, **headache**, depression of spirits, yellowish tongue, disgust for food, nausea, and perhaps vomiting and constipation; a feeling of fullness, weight, and soreness in the region of the liver, with a dull pain extending to the right shoulder; slight jaundice, the eyes yellow, and the complexion muddy.

"Treatment: 1. With the patient on his back, give treatment No. 25, Page 48.

"2. Treatment No. 20, page 43.

"3. Have the patient sit on a chair and give treatment No. 12, page 35.

"4. If patient be constipated, give treatment for same, page 97.

"Give all the above treatments three times a week; one month will be sufficient to cure the most aggravated case.

"Diet: There should be a total abstinence from food for at least two days, after which the patient may take a very light meal in the middle of the day. After a few days the diet may be increased, and diet list No. 4, page 143, prescribed.

"There will be no danger of the patient starving to death; on the other hand good results will follow, as fasting gives the stomach and liver the rest they need, biliousness being brought on in many cases by overwork of these organs.

"Baths: Warm full baths No. 4, page 155, taken every other day, will be found beneficial, also drinking a cup of hot water one hour before each meal and another just before retiring.

"If patient be constipated, a warm-water injection into the rectum, about three times the first week, will materially help the condition.

"Exercise: Should be taken plentifully out of doors, with the following movements of the body every morning: Patient standing erect, place hands on the hips and bend the upper part of the body backward and forward several times, having first taken a long breath and holding it throughout the movements.

"Next raise the arms high above the head and bend forward, endeavoring to touch the floor with the fingers without bending the knees; do this several times while holding the breath, having first taken a long inspiration." (*A Manual of Osteopathy*, Eduard W. Goetz, D.O., 1909)

"Rectal Douche

"It is of the greatest importance in some diseases to thoroughly cleanse the colon, and this can best be done with the patient lying on his left side on a bed or couch. First provide yourself with a two-quart fountain syringe, fill this with clean, very warm water, and allow it to pass into the rectum of the patient. Hold or hang the bag of the syringe at least four feet above the patient to give the water sufficient force. Allow the full two quarts to be taken in, then the patient is to roll over on his back, then to the right side, and back again to the left. He can then get up and pass it off.

"The douche will be found especially valuable when given in the early stages of fever, **headache**, tonsilitis, diarrhea, constipation, grippe, jaundice, and some of the inflammatory diseases. Do Not give it oftener than every three days." (*A Manual of Osteopathy*, Eduard W. Goetz, D.O., 1909)

"PRESSURE ON THE GREAT OCCIPITAL NERVES

"WITH the patient sitting on a chair, place your left hand on his forehead, and with the right hand place the thumb on one side and the fingers on the other, of the spine, over the site of great occipital nerves which leave the skull at a point shown in cut No. 1 K. K., page 24; press these two points hard, and at the same time push the head backward with the left hand and hold same for two or three minutes. This treatment will usually **stop any headache**, but for more severe attacks see treatment for same, page 77." (*Text-Book of Osteopathy*, American College of Mechano-Therapy, 1910)

"TREATMENT OF THE SUPRA-ORBITAL NOTCHES

"HAVE the patient sitting on a chair or stool; with one finger of each hand press against the notches which may be felt in the bony arches above the eyes, the location of which may be seen in cut No. 4 A A, page 27. If used in connection with the treatment for **headache**, inhibit the nerves that leave the skull at this point, by holding same for about a minute. If for eye trouble,

stimulate the nerves by a vibrating motion." (*Text-Book of Osteopathy*, American College of Mechano-Therapy, 1910)

"HEADACHE

"Definition - Pain in the head.

"Causes - Headache is always a symptom, never a disease in itself. It may be due to derangements of the stomach and liver, toxemic conditions, congestion and anemia of the brain, eye-strain, organic diseases of the brain, functional disorders and reflex causes.

"Symptoms - The most prominent symptom is pain. The character and location varies according to the disease it is dependent upon. It may be **superficial or deep, dull or heavy, throbbing or stabbing, general or local, and constant or paroxysmal**.

"Treatment - 1. Reduce the heart action by freeing the ribs on left side and holding the inferior cervical ganglia.

"2. Raise the clavicles.

"3. Stretch the neck, manipulate the neck muscles and stimulate the spinal accessory nerve.

"4. Treat the chest, liver, stomach and bowels.

"5. To relieve nausea, elevate and separate the third, fourth and fifth ribs on the right side.

"Acute headache can be relieved in this manner: The patient may assume either of the following positions, sitting, standing or lying down. Place the fingers of both hands on both sides of the cervical spines, the upper portion close to the occiput and covering the vaso-motor area, and the thumbs on the side of the neck, covering the pneumogastric nerve. Press gently on the neck with the fingers and at the same time press on the nerves mentioned." (*Text-Book of Osteopathy*, American College of Mechano-Therapy, 1910)

"VALVULAR DISEASE OF THE HEART

"Causes - Disease of the valves of the heart usually follows acute attacks of endocarditis. About one half of all cases result from rheumatism or a rheumatic diathesis. It may be caused by systemic poisoning from malaria, chronic rheumatism and syphilis or chemical irritants. Long muscular strain may give rise to this disease, particularly of the aortic valve. Malformation of the valves and heredity are predisposing causes. More than one-half of all cases occur under the age of thirty.

"Symptoms - The symptoms vary little in all forms of valvular diseases. If marked hypertrophy is present, exercise, mental strain or excitement may bring on **throbbing headache**, dizziness and ringing in the ears. **Dull headache**, **flashes of light before the eyes and pallor of the face are early symptoms of aortic incompetency**. At other times dyspnoea may be present. Hot flashes and sweats sometimes occur. The patient feels faint on arising suddenly and the heart palpitates. Pain may or may not be present. The pain may be dull or sharp and extend to the shoulders and down the arms, particularly the left one. Cough is sometimes present. The patient is subject to dreams, is peevish and irritable.

"Differential Diagnosis - In aortic incompetency the apex beat is directed downward and outward; transmitted down the left side of the sternum.

"In aortic stenosis the apex beat is not so far displaced, while the systolic murmur in the aortic area is transmitted to the carotids.

"In mitral incompetency the apex beat is rarely directed below the sixth interspace. It may, however, extend to the anterior axillary line. The systolic murmur at the apex is transmitted to the axilla and is often heard in the back at the angle of the scapula.

"The impulse is not marked in mitral stenosis. The presystolic murmur heard at the apex is loud and rough in character.

"Tricuspid incompetency gives rise to pulsation in the epigastrium and jugular veins. The systolic murmur at the lower end of the sternum is transmitted to the right or left.

"In tricuspid stenosis there is a weak pulsation in the jugulars and a presystolic murmur is heard at the lower right border of the sternum. Pulmonary incompetency causes pulsation in the jugulars and the diastolic murmur is transmitted down the sternum.

"In pulmonary stenosis the veins are dilated and the systolic murmur is transmitted toward the left shoulder. The second pulmonic sound is weak.

"General Treatment - 1. Apply the treatment carefully and not too long or too severely.

"2. Equalize the circulation.

"3. Give a general treatment.

"4. Relax the muscles in the cervical and dorsal regions.

"5. Raise the ribs and separate those on the left side.

"6. Raise the clavicles.

"7. Manipulate the sympathetic ganglia in the neck.

"8. Relax the muscles over the region of the heart.

"Treatment may be varied according to condition, The aim should be to correct the lesion and take off pressure everywhere." (*Text-Book of Osteopathy*, American College of Mechano-Therapy, 1910)

"INTESTINAL INDIGESTION

"Definition - Inability of the intestinal fluids to digest food.

"Causes - Imperfect diet, use of tobacco, diseases of the stomach, liver and pancreas, lack of exercise and nervous exhaustion.

"Symptoms - The most prominent symptoms are pain, flatulency, rumblings in the bowels due to gas, loss of appetite, **headache**, diarrhea alternated with constipation, colic and pain in the limbs. In the chronic form there is dizziness, insomnia, ringing in the ears, cardiac disturbance, anemia, high-colored urine and emaciation.

"Treatment - 1. Free all the muscles of the neck.

"2. Raise the clavicles, shoulders and chest muscles by raising the arms. Treat the spine as far down as the twelfth dorsal with the fingers, while the arms are raised, pulling the muscles strongly upward and outward each time the arms are raised. Treat both sides.

"3. Manipulate the liver, stomach and bowels slowly and deeply for fifteen or twenty minutes.

"4. Relax the sphincter muscles.

"5. Give a general treatment.

"6. Flush the bowels with warm water every night.

"7. Treat diarrhea, if present.

"Treat patient every other day. (*Text-Book of Osteopathy*, American College of Mechano-Therapy, 1910)

"SIMPLE DIARRHEA

"Definition - An unusual frequency in evacuation of the bowels, characterized by liquidity of the feces.

"Causes - Diarrhea occurs most frequently in neurotic individuals as a result of fatigue, fear, excitement, and shock or nervous exhaustion. It may be brought on reflexly by gastric disturbances, teething and exposure to cold. Overloading of the stomach, fresh or unripe fruits and decomposing articles of food in the intestines frequently give rise to this disorder.

"Symptoms - The most important symptom is the considerable increase in the number of bowel movements, more particularly in the morning soon after arising. The stools are usually fluid in character and free from blood, mucus or pus. The stools may contain partially digested food. In some cases no other symptoms are manifest, while in others there is dizziness, palpitation of the heart, a feeling of oppression, and flashes of heat and cold. Sometimes the abdomen is distended with gas, the **tongue is coated and headache is present**.

"Treatment - 1. Extend the spine by placing the knee in the patient's back in the first and second lumbar areas and bending the body back against the knee and holding it in that manner for a few seconds.

"2. Place the patient on abdomen and apply steady pressure on either side of the spine from the middle dorsal region to the coccyx for about ten minutes.

"3. Extend the, legs backward while the hand is placed in the lumbar region of the spine.

"4. Completely relax all the tissues of the spine and back.

"5. Give other treatment to meet indications." (*Text-Book of Osteopathy*, American College of Mechano-Therapy, 1910)

"CONSTIPATION

"Definition - An infrequent or difficult evacuation of the feces.

"Causes - Persons of a bilious or nervous temperament are mostly subject to this condition. Sedentary habits, lack of exercise, prolonged mental work, and anxiety or worry are the most frequent causes. Irregular habits, diet and drugs and the constant use of cathartics are usually exciting causes. It may also be associated with other intestinal disorders.

"Symptoms - The abdomen is usually distended. A considerable amount of gas is passed, and often colicky pains are present. The symptom most prominent is absence of regular fecal evacuation. Associated with this disorder are coated tongue, bad taste in mouth, nausea, dizziness, belching of gas, fitful appetite and irregular pulse. A large fecal mass can usually be felt on inspection and palpation.

'Treatment - 1. Correct vertebral lesions. (The lower half of spine will usually be found the cause.)

"2. Manipulate the liver by vibration and kneading.

"3. Knead the bowels along the line of the colon."

- "4. Knead the abdomen.
- "5. Set the coccyx, if dislocated.
- "6. Dilate the sphincter ani with a rectal dilator.
- "7. Relax the muscles of the lower part of the back by proper measures.
- "8. Raise the lower ribs.
- "9. Extend the neck and neck muscles.

"10. Apply vibration to the spine from the first to the fourth sacral vertebra.

"Diet - Drink plenty of water, buttermilk and acid beverages. Eat cooked fruits, vegetables and honey. Avoid too much starchy foods and sweets.

"Cases should be treated at least twice a week." (*Text-Book of Osteopathy*, American College of Mechano-Therapy, 1910)

"CHRONIC NASAL CATARRH

"Definition - A chronic inflammation of the nasal mucous membrane, with more or less change in structure.

"Causes - It is usually the result of repeated attacks of acute catarrh, or inhalation of irritating gases or dust. Syphilis and scrofula are also predisposing causes.

"Symptoms - The nostrils feel full and secretion is increased. The secretion is usually thick and greenish, and when dropping down into the pharynx, it sets up an irritation which causes paroxysms of hawking and spitting. This is usually worse in the morning on arising. The sense of smell is more or less impaired. Hearing is lessened, due to extension of the inflammation to the

"Eustachian tubes. A **dull frontal headache** is almost constantly present. Sudden changes of temperature always cause exacerbation of these symptoms.

"Treatment - 1. Manipulate and stretch the muscles of the back of the neck.

- "2. Rotate the head in extension.
- "3. Manipulate the angles of the inferior Maxillary.
- "4. Vibrate the ears and temples.
- "5. Manipulate the forehead.
- "6. Vibrate the facial nerve.
- "7. Apply pressure on the nose at the inner canthus.
- "8. Raise the clavicles.
- "9. Extend the chest muscles and ribs by deep inspiration.
- "10. Stretch the neck.

"11. Adduct and abduct the head.

"Treat three times weekly.

"Prognosis must be guarded." (*Text-Book of Osteopathy*, American College of Mechano-Therapy, 1910)

"TREATMENT OF THE NECK

"1. Apply deep pressure with the fingers on both sides of the spine, just at the base of the skull. Used in fevers and for **headaches**.

"2. Turn the head to either side as far as possible without inconveniencing the patient. Look for lesions.

"3. Flex the head upon the chest.

"4. Patient in reclining position. Rotate the head in one direction and the neck in the other. Reverse the movement.

"5. Stretch the muscles of the neck by placing one hand under the chin and the other under the occiput and gradually pull the head toward you." (*Text-Book of Osteopathy*, American College of Mechano-Therapy, 1910)

"METHOD OF STIMULATING VASO-MOTOR NERVES

"The patient sitting on a stool, chair, bed or bench, the operator, standing in front, places both hands around neck, letting fingers meet posteriorly with ends of same somewhat curved, pulps of ends of fingers pressing against back of neck on either side of cervical spinous processes, with the thumbs looking upward at the sides of the head, steadies the head of patient, pulls gently, yet firmly with fingers, and steadying head with hands, inclines to bend neck forward and head backward at the same time, **making gentle pressure on back of neck, embracing vasomotor region, holding the fingers in position for a moment, then changing fingers to other points on neck and giving springing motions of neck.** This is one of the moves for **headache**, and comes in the general treatment, and utilized in the treatment of many diseases, stiffness of the muscles of the neck, neuralgia, rheumatism, spinal affections, etc. (*Neuropathy*, A. P. Davis, M.D., N.D., D.O., 1909)

"CHIN-OCCIPITAL-NECK EXTENSION

"This plate represents a neck treatment, and a method of stretching the muscles in many cases where movement is not so much needed as stretching the whole muscular system upward, and at the same time controlling nerve influence as well as arterial circulation, venous and lymphatic activity. It is **curative for many severe headaches**.

"The arm of the operator should be placed under the chin, the bend of the elbow receiving the chin, and the arm so held as not to choke the patient, the fingers and thumb of other hand situated on either side (both sides) of the spinous processes of vertebrae, tip close to the base of skull, rather firmly pressed; lift chin gently with the arm, pulling upwards, and at the same time pressing with finger and thumb against the back of neck. The head should be tilted gently backward and forward several times, using gentle upward tilt each time. This should be done easily, but firmly, changing the position of thumb and fingers so as to cover all of the cervical vertebrae at one sitting." (*Neuropathy*, A. P. Davis, M.D., N.D., D.O., 1909)

"DIPHTHEREA AND SORE THROAT

"The patient being seated on a stool, the operator, standing at the back, places one hand on the forehead, the other on the side of the neck, fingers gently curved so as to grasp the skin, and as the head is rolled toward opposite side of neck, the hand on neck on opposite side grasps the skin up close to the posterior angle of lower jaw, or anywhere at the side of the neck, pulling the hand gently as the head is pushed or turned in that direction, and then head returned to its normal condition, face looking straight in front of body; then same move is repeated a number of times, the fingers being placed in different places on the neck, and so on until all of the muscles of that side of the neck are thoroughly manipulated. This sort of treatment is requisite in many diseased or congested conditions of the neck, and is one of the treatments for goiter, diphtheria, tonsilitis, croup, wry neck, **headache**, etc." (*Neuropathy*, A. P. Davis, M.D., N.D., D.O., 1909)

"The transverse processes of the atlas can be easily distinguished between the mastoid process and the angle of the inferior maxillary bone. They should be located midway between

these points. Sometimes you will find the transverse processes of this vertebra too far forward and making pressure on the carotid artery, **causing headache** and eye troubles. You may also find one process too far forward and the other too far back, which shows the vertebra is twisted.

"The ligamentum nuchae, which is attached to the occipital protuberance and to the spinous processes of all the cervical vertebrae to the seventh, sometimes becomes tense and contracted, **causing headache** and discomfort at the back of the neck. These symptoms are often relieved by a thorough stretching of this ligament.

"By turning the head to one side you may bring into prominence the articular processes of the vertebrae in the neck, and then tell whether they are in line or in normal position. If you find sore spots along the spine they denote either a slipping of the vertebrae or contracted tendons or muscles which make pressure upon the spinal nerves at their exit.

"The ligaments and tissues covering the spine may thicken and fill in the normal curves, causing what Hazzard calls a "smooth spinal column" in distinction from the condition known as spinal curvature." (*Essentials of Osteopathy*, Isabel M. Davenport, M.D., D.O., 1903)

"THE SPLANCHNIC NERVES.

"Hazzard says, "The splanchnics are some of the most important tools with which the Osteopath works. They are of such far-reaching connection that their importance becomes apparent, hence their constant use by the Osteopath."

"The splanchnics are the nerves which govern the viscera and they are the sympathetics from the lateral chains of thoracic ganglia.

"The great splanchnic arises from the fifth or sixth dorsal and from all the thoracic ganglia below down to the ninth or tenth.

"It perforates the diaphragm and joins the lower part of the semilunar ganglion. In the chest it sometimes divides and forms a plexus with the smaller splanchnic. The fibers are white, medulated, most of them, and come from the anterior roots of the spinal nerves. The greater splanchnic gives branches to the aorta and front of the vertebrae; the smaller splanchnic arises from the ninth and tenth, sometimes from the tenth and eleventh, thoracic ganglion, or it may arise from the sympathetic cord itself without the intervention of ganglia. It also passes through the diaphragm, sometimes separately, sometimes with the cord of the greater splanchnic. Like the greater splanchnic it joins the lower part of the semilunar ganglion and sends branches to the renal splanchnic, if that is lacking or is small.

"The smallest or renal splanchnic, if present, arises from the last thoracic ganglion and passes through the diaphragm with the sympathetic cord and goes to the renal plexus.

"A fourth splanchnic is sometimes found in the cervical region. Hazzard quotes Gaskell, as quoted by Quain and substantiated by Byron Robinson, as saying there are visceral branches from the second, third and fourth sacral nerves, and these he calls the sacral or pelvic splanchnics.

"The cervico-cranial rami viscerals are visceral branches from the spinal accessory, pneumogastric, glossopharyngeal, and facial nerves. "So," Hazzard says, "you see that visceral nerves have their origin, from these cranial nerves, also a branch from the ciliary ganglion from the third nerve." He quotes Byron Robinson as saving, "There are certain fine white medulated nerves which Gaskell mentioned and which pass from the spinal cord in **the white rami communicantes between the second dorsal and second lumbar nerves, inclusively, to supply viscera and blood vessels**. These nerves should be called, as Gaskell suggests, splanchnics. Hence we will have first the thoracic splanchnics, second the abdominal splanchnics and third the pelvic splanchnics."

"Hazzard says above the second dorsal and below the second lumbar gray rami communicantes are found, and Robinson calls them peripheral supplying the parietes of the body. He quotes further from Quain that "The medulated fibers such as we find in the splanchnics which pass in the sympathetic system are classed by Kolleker as (a) sensory, (b) vaso- and visceroconstrictors, and (c) vaso- and visceroinhibitors," and says, "Hence we have passing from the spinal cord into the great prevertebral plexuses in the different regions these sensory- vaso-dilator and constrictor and visceroinhibitor and constrictor fibers."

"Quain says the sensory are found only passing from the cranial nerves, but that the visceral and vasomotor fibers are found all the way down the cord. Hence the visceral and vasomotor fibers are found in the splanchnics. He quotes Quain further in that the splanchnic nerves proper act first as visceroinhibiting fibers for the stomach and intestines, second as vasomotor fibers to the abdominal blood vessels, third as afferent fibers from the abdominal viscera -- that is, fibers from the abdominal viscera back to the center, and says that explains why it is that we get secondary lesions, as we call them. You may have some trouble in a viscus, knowing that you can have different fibers from the viscus to the center you can account for the center being affected and the impulse coming out from it to the posterior spinal nerves, for example, and causing contraction of the muscles in the back. Hazzard goes on to show the significance of the splanchnics to the Osteopath by saying, "In the first place they must be connected with the spinal cord itself, since they arise from the anterior roots and run through the cord to the brain. It is doubtful how close a connection they have with the brain centers, but they have at least a close connection with the bulbar center, the vasoconstrictor center of the medulla. Then it is probable that these splanchnics have a close connection with cardiac and pulmonary fibers arising from the upper part of the spinal cords, because we have seen that the center for the lungs extends from the second and seventh dorsal and that we work in the upper dorsal region for the heart, and there are certain vasomotor fibers from these regions to the heart and lungs, so that it is almost indisputable that there is a connection between the splanchnics and what we might call other splanchnics for the heart and lungs.

"In the next place we have seen that the first two splanchnic nerves join the semilunar ganglion, and the third the renal ganglion and they are connected directly with the solar plexus and through it with the other great prevertebral plexus, the **hypogastric plexus**, and through that with those secondary plexuses such as the superior and inferior mesenteric, hemorrhoidal, portal, Auerbach's and Meissner's, and the various plexuses throughout the pelvis and elsewhere. Hence any one who sees the significance of osteopathic work will see the significance of this farreaching connection with visceral and organic life. Then, again, remember that in the thorax the first or greater splanchnic sends branches directly to the aorta itself. Hence it is that the operator so frequently works upon the splanchnics. It does not make any difference what kind of trouble you may have, the general health is likely to be affected and it must be attended to; and whether you are working upon the stomach, liver, portal system, upon the intestines or pelvic viscera, you will work in part upon the splanchnics.'"

"I have quoted so much at large from these excellent authorities because I want you to fully understand the great importance of the splanchnic nerves. They and their connections explain the osteopathic centers and the manner of influencing local or general circulation. It is a favorite plan, both in medicine and Osteopathy, to increase circulation at one point to relieve congestion, and because of the immense blood supply and of the splanchnic control here the abdomen is a common ground for such a result. The M. D. will give a cathartic with a view to increasing the amount of blood in the intestinal tract and thus taking it from the head, lungs, liver or whatever part may be over-gorged. It has been said that a man may bleed to death within his own belly, meaning that you may attract all of the blood of the body to the abdomen and thus deplete the brain, heart, lungs, etc., as to cause death. For another example: It was a common treatment at the Illinois Eastern Hospital for the Insane to give sleepless patients food during the night, instead of medical hypnotics, because we figured that the blood naturally is attracted to an active part. It goes where it is most needed and so by inducing gentle digestion or setting the stomach to work the blood is attracted from the brain to the stomach, and the brain being relieved of the over-amount of blood becomes quiet and the patient sleeps; and so by treating the splanchnics you often get such a result. **Headache is largely relieved in this way, when it is reflex as well as when due to local congestion**." (*Essentials of Osteopathy*, Isabel M. Davenport, M.D., D.O., 1903)

"UREMIA (Toxic condition of the blood from accumulation of urea. Due to retention of poisonous materials which should be eliminated by the kidneys.)

"SYMPTOMS

"Headache; nausea; vertigo; vomiting; dilatation of the pupils; delirium; convulsions; and coma.

"TREATMENT

"1. Place the patient upon the side; beginning at the eighth dorsal, move the muscles upward and outward to the last lumbar vertebra, being very particular over the lesser splanchnic nerves to manipulate deeply, as it is here we are very apt to discover conditions which are the real cause of the failure of the kidneys to properly perform their duties.

"2. Place the patient on the back; and knead the kidneys careful] and thoroughly; also give vibrations.

"It is often advisable in this disease, in addition to the above treatment, to give a thorough Treatment to Equalize the Circulation.

"Treatment will occupy about twenty or twenty-five minutes, and should be given each day." (*Osteopathy Complete*, Elmer D. Barber, D.O., 1898)

"HEADACHE (Pain in the head.)

"SYMPTOMS AND CAUSES

"Gastric or dyspeptic headaches are often occipital, sometimes frontal, and if accompanied by constipation, are diffuse and frontal. Uterine and ovarian headaches are occipital and vertical.

"Nervous headaches are seated on the top of the head.

"If pulsating and throbbing, indicates vaso-motor disturbances; squeezing and pressing, nervous exhaustion or affection; sharp and boring, hysterical, neurotic, or epileptic; dull and heavy, toxic or dyspeptic; hot and burning, rheumatic or anemic.

"Headache, not caused by fevers, the stomach, or the uterus, can be almost instantly cured by stretching the neck and a pressure on the nerves at the base of the occipital bone.

"HEADACHE TREATMENT

"1. Place the right hand on the back of the patient's neck, the thumb on one side and the fingers on the other, close to the head; place the left hand on the forehead, tipping the head backward gently, lifting quite strongly with the right arm, while rotating the head gently from side to side (see cut 34).

"2. Standing in front of the patient and tilting the head backward, gently hold the vasomotor center (cut 35).

"3. Place one hand on the forehead the other upon the back of the head, and press for several moments, hard.

"4. Standing behind the patient, with one hand on each side of the forehead, make five or six quick strokes.

"5. Place one finger on each temple, and, while pressing, gently move the fingers from right to left with a circular motion.

"6. With the right hand raise patient's right arm high above the head, with the thumb of the left hand between the spine and the scapula, beginning at its upper angle, moving the muscles upward with a strong pressure at the same instant.

"This treatment will not occupy over ten minutes. First, second, and third will cure any ordinary headache, and the entire treatment will cure any case of headache, no matter how severe, if not caused by fevers, the stomach, or the uterus, in from five to ten minutes.

"Of the scores of cases cured by us, we will mention the case of a lady of Scammon, Kansas, who would have an attack of nervous headache once each week, lasting from two to four days; she suffered intense pain, the muscles contracting, until they drew the head backward upon the neck. At these times electricity, hypodermic injections, and even chloroform, had failed to give relief Being anxious to put our method to the severest test, we undertook her case, and were even more successful than we had dared to hope. In ten minutes she was sleeping quietly, apparently free from pain. In the morning a second light treatment was given, which gave her complete relief, and the continuation of the treatments for one month effected a permanent cure."

"NERVOUS HEADACHE

"TREATMENT

"In addition to our Headache Treatment, place the patient on the face, and with **the thumbs, beginning at the neck, press gently the entire length of the dorsal vertebra, after which, if the patient has retired, hold the vaso-motor center a moment** (cut 13), and in a few minutes your patient will be asleep.

"SICK HEADACHE

"Sick headache being caused by a reflex action of the pneumogastric and splanchnic nerves, the stomach is at fault; we must first reach that organ through the splanchnic nerves.

"TREATMENT

"1. Place the patient on the back; reaching over as in cut 21, with the fingers pressing hard on each side of the spine, beginning between the lower angle of the scapula and ending as low as the last dorsal vertebra, lift the patient gently with your fingers; then, moving down the breadth of the hands, repeat the application, thus desensitizing the splanchnic nerves.

"2. Press gently at first, then gradually harder, over the pit of the stomach.

"3. Give our regular Headache Treatment.

"It will take from ten to fifteen minutes to give this treatment, at which time the patient will be improving, although it may be some time before the pain entirely abates.

"A continuation of this treatment every second day will cure the most aggravated cases of **chronic sick headache**.

"MIGRAINE, MEGRIM, OR SUN-PAIN (Paroxysmal neurosis, with unilateral headache.)

"SYMPTOMS

"Nausea; vomiting; derangement of vision and sensation; tingling and numbness. More common in females.

"TREATMENT

"1. Place the patient upon a chair; the operator, standing behind, places the right hand upon top of patient's head, and the thumb of the left hand close to the spine of the seventh cervical vertebra on the right side; bend the head forward as far as possible, rotating it gently, but as far as possible to the left; press hard with the thumb, endeavoring to push the muscles as far as possible from the spine, as the head is returned, by reversing the rotation, to its normal position (cut 33); move the thumb up to the next cervical, rotate the head as before: and repeat, until the occipital is reached. Treat the opposite side of the neck in a similar manner.

"2. Place the thumbs upon each side of the first dorsal vertebra, the fingers resting upon the patient's shoulders, and move the muscles upward and outward with the thumbs as low as the fourth dorsal vertebra.

"3. Place the patient on the back; with one hand under the chin, the other under the occipital, give gentle extension and rotation of the neck.

"4. Place the finger-tips over the Gasserian ganglion (cut 49), and vibrate one minute.

"5. Place the hands on the sides of the neck, fingers almost meeting over the upper cervicals; tip the head backward, pressing gently with the fingers three or four minutes.

"Treatment will occupy about ten minutes, and should be given each day." (*Osteopathy Complete*, Elmer D. Barber, D.O., 1898)

"CHRONIC POST-NASAL RHINITIS (Extension of catarrh into pharynx.) "SYMPTOMS

"Tingling and sense of soreness at root of nose; pain in soft palate and posterior nares; frontal headache; flow of thick secretion into pharynx; impaired taste, smell, and hearing.

"TREATMENT

"See Coryza.

"ATROPHIC RHINITIS, OR OZENA (A chronic form of nasal catarrh, with atrophy of the mucous membrane and ulceration of the nasal cavities.)

"SYMPTOMS

"Frontal headache; exceedingly fetid discharge; hawking and spitting of brownishgreen crusts, often blood-tinged.

"TREATMENT

"Can usually be benefited by Coryza Treatment, but cannot be cured if of a syphilitic nature." (*Osteopathy Complete*, Elmer D. Barber, D.O., 1898)

"AMENORRHEA (Absence of menstruation between puberty and the menopause. May be divided into: Emansio Mensium, where menstruation has never appeared; Suppressio Mensium, where menstruation is suppressed.)

"SYMPTOMS

"When caused by phthisis, there is emaciation, cough, and night sweats; when caused by anemia, there is dyspnea and palpitation on exertion; depraved appetite; **headache**; constipation; hysteria; pallor, and edema.

"TREATMENT

"In suppressed menstruation osteopathic treatment, freeing and equalizing the circulation and nerve-wave to the genital organs, is remarkably successful, usually giving immediate relief, and a continuation of the treatment a permanent cure, except in cases where the suppression of the menses is the direct result of tuberculosis.

"1. Place the patient on the face; beginning at the eighth dorsal vertebra, with the thumbs upon each side of and close to the spinal process, move the muscles upward and outward, gently but very deep, the entire length of the spine.

"2. Beginning at the first lumbar vertebra, with both hands upon the same side of the spine, the fingers close to the spine, move the muscles slightly upward and strongly outward, with quite a strong pressure, permitting the hands to slip over the flesh as they are drawn outward. Treat in this manner to the lower part of the sacrum, being very thorough in the lower lumbar and sacral region.

"3. Place the patient on the back; flex the limbs slowly but strongly against the abdomen, hold in this position a few seconds, and then move them gently from side to side without relaxing the pressure.

"4. One operator grasping the shoulders, an assistant the feet, give gentle extension of the spine.

"5. Place the hand lightly over the uterus, and vibrate gently one minute.

"6. It is very often advisable in cases of Amenorrhea, or suppressed menstruation, to give such portion of our General Treatment as conditions indicate. It is also always advisable to make careful examination of the spine, endeavoring to detect, if possible any irregularity in the spinous processes in the vertebrae of the lumbar region. Slight dislocation here, caused by strain or accident, is often the cause of serious troubles See Dislocation of the Lumbar Vertebrae.

"CONGESTIVE DYSMENORRHEA

"CAUSE

"May result from exposure to cold, defective portal circulation ,plethora, metritis, pelvic peritonitis, ovaritis, areolar hyperplasia, fibrous tumor, displacement of the uterus, or mental disturbances.

"SYMPTOMS

"Feeling of weight and heat in the back and pelvis just before the flow; elevation of temperature; rapid pulse; flushed face; **headache**. Usually relieved by free flow.

"TREATMENT

"1. See Amenorrhea.

"2. Displacements of the Uterus.

"3. In the treatment of this disease a great deal depends upon the judgment of the operator in selecting such treatment as conditions indicate, always endeavoring to remove the cause and to free and equalize the circulation and nerve-wave.

"MEMBRANOUS DYSMENORRHEA (Usually associated with chronic endometritis and poor general health.)

"SYMPTOMS

"Colicky pains at the menstrual period, with expulsion of organized membranes, either as a whole or in pieces.

"TREATMENT "See Amenorrhea. "MENOPAUSE, OR CHANGE OF LIFE (Final cessation of the menses.) "SYMPTOMS

"While the change is in progress there is commonly more or less functional disturbance of the general health, the nervous system especially manifesting various changes, such as vertigo, syncope, **headache**, flushes of heat, urinary troubles, pains in the back extending down the thighs with creeping sensations, heat in the lower part of the abdomen, occasional swelling of the lower extremities, itching of the private parts, mental irritability and restlessness culminating seriously sometimes, especially in patients of a decided nervous character. Sometimes menstruation ceases abruptly. The monthly period may be arrested by cold, fright, or some illness; earlier in life the suppression would have been followed by a return of menstruation after removal of the cause, but now Nature adopts this opportunity to terminate the function. Gradual termination is, however, more frequent and is attended with less disturbance of health. In gradual extinction one period is missed and then there is a return, a longer time elapses and there is an excessive flow; this continues for a time, the returns being fewer and farther apart, until they cease altogether.

"At this critical period there is not infrequently an enlargement of the abdomen, which, though it may occur earlier in life, is due to causes peculiar to this.

"TREATMENT

"A General Treatment every other day will equalize the circulation and give wonderful relief." (*Osteopathy Complete*, Elmer D. Barber, D.O., 1898)

"ACUTE GASTRITIS, OR INDIGESTION; CHRONIC GASTRITIS OR DYSPEPSIA (Inflammation of the stomach, characterized by difficulty or failure in changing food into absorptive nutriment.)

"SYMPTOMS

"These vary greatly, both in character and intensity, but there is commonly one or more of the following: impaired appetite, flatulence, and nausea; eructations, which often bring up bitter or acid fluids; furred tongue, often flabby, large, or indented at the sides; foul taste or breath and heartburn; pain and a sensation of weight and inconvenience or fullness after a meal; irregular action of the bowels; **headache**, diminished mental energy and alertness, and dejection of spirits; palpitation of the heart or great vessels, and various affections in other organs.

"CAUSE

"Dyspepsia, or indigestion, is usually caused by a constipated condition of the bowels, which, becoming overloaded, hinder the action of the stomach until the glands of that organ become diseased. Thus we are again confronted with the parallel of an electric car, which, having lost its current, obstructs the main track. We expect to prove to the intelligent reader that when the peristaltic action of the small intestine loses part of its nerve-power, occasioned by a pressure on the splanchnic center at or near the spine, the foundation is laid not only for constipation, liver complaint, and various stomach and kidney troubles, but by blocking the main track, one organ after another becomes diseased, and finally the stomach, bloated or filled with gas, presses so hard upon the diaphragm, compressing the left lung, that it affects even the lungs and heart. Many cases of heart trouble we have traced directly to this cause, and cured by working on these never-failing principles.

"TREATMENT

"1. Place the patient on the side; with the fingers of both hands upon the spine, beginning at the upper cervicals, move the muscles upward and outward, very deep and thoroughly, as low as the last dorsal (see cut 7). Tender spots will usually be found between the second, and sixth dorsal, over the nerves of assimilation, and should be treated thoroughly. As soon as the soreness begins to disappear, the patient will commence to recover. Careful investigation in the immediate region where the tenderness is discovered will usually enable the operator to detect some slight contraction in the deep muscles, thus obstructing the circulation, and producing a congested condition.

"2. Place the hand gently over the stomach and vibrate strongly two minutes, thus stimulating the circulation through that organ.

"3. In all cases where constipation is present, beginning at the cecum manipulate the colon very thoroughly and carefully, following it its entire length to the rectum, endeavoring to manipulate and move forward any hardened lumps of feces that may be discovered. Also manipulate the gallbladder and liver. See Constipation.

"4. Stand behind patient, and, raising the right arm high above the head, lifting strong, press hard with the thumb on the fourth dorsal vertebra, lowering the arm with a backward motion. This pressure reaches the nerves that control the pyloric valve, causing, after a few treatments, the pyloric orifice to permit the escape of gases and undigested food into the duodenum.

"5. With left hand under patient's chin, draw the head backward and to the side; with the right **manipulate the muscles of the neck, thereby freeing the pneumogastric nerve** (cut 18).

"This disease is usually caused by a complication of troubles, all of which must be removed before we can hope to effect a cure. A great deal, therefore, depends upon the good judgment of the operator in discovering the real cause, and employing such treatment as will reach the conditions as they exist.

"6. In all cases of fever, hold the vaso-motor two or three minutes. See Vaso-motor. "CHRONIC ENTERITIS, OR INTESTINAL CATARRH (Usually follows acute attacks.) "SYMPTOMS

"Sallow complexion; constipation, alternating with diarrhea; stools containing undigested food; headache; impaired nutrition; colicky pains; and abdomen distended.

"TREATMENT

"1. Place the patient on the side; beginning at the upper cervicals, move the muscles upward and outward, gently but deeply, the entire length of the spinal column, being very particular to treat thoroughly in all regions where any tenderness is discovered. Stimulation in this manner over all the nerve-centers the entire length of the spinal column tends to equalize the nerve-wave to the various organs.

"2. Place the patient on the back; with the hand under the chin, draw the head backward, rotating it from side to side, with the disengaged hand manipulating the muscles immediately over the pneumogastric nerve.

"3. In all cases where constipation is present, a light Constipation Treatment should be given. In cases of diarrhea, give a light treatment for the same; the object being to equalize the action of the bowels.

"4. Drawing the arms strongly above the head two or three times, at the same instant pressing hard upon the fourth or fifth dorsal vertebra, will relieve the colicky pain.

"This treatment will occupy about fifteen minutes; will usually give immediate relief; and should be given every other day until complete recovery is effected.

"FLUX OR ACUTE DYSENTERY (Inflammation of the large intestine, with frequent evacuation of the bowels.)

"SYMPTOMS

"Prostration; fever; evacuations mucous and bloody; vertigo; weakness; vomiting; nausea; and **headache.** Usually occurs in summer or fall.

"TREATMENT

"1. Place the patient on the side; beginning at the upper cervicals, move the muscles upward and outward, gently and carefully, along the entire length of the spinal column. Treat the opposite side in a similar manner.

"2. Stand beside the bed, patient lying on his back; place one hand on each side of the spine, below the last dorsal, the fingers pressing close to the spine upon each side; raise the patient, his weight resting upon the ends of the fingers, until his body is several inches off the bed; hold in this position for a moment; and repeat, this time placing the fingers nearer the sacrum.

"3. Place the hand lightly over the bowels, and vibrate gently two or three minutes.

"4. Place the hands upon each side of the neck, the fingers almost meeting over the spinous processes of the upper cervicals (see cut 13); press gently two or three minutes, to reduce the fever. See Vaso-motor.

"Treatment will occupy ten or fifteen minutes, and should be given every four hours." (*Osteopathy Complete*, Elmer D. Barber, D.O., 1898)

"ACUTE LITHEMIA, BILIOUSNESS, OR TORPID LIVER (Excess of uric acid or other metabolic compounds in the blood).

"SYMPTOMS

"Furred tongue; nausea; bitter taste; anorexia; slight fever; constipation; **headache**; stupor; perspiration, alternating with flashes of heat.

"TREATMENT

"1. Place the patient on the side; beginning at the upper cervicals, move the muscles upward and outward, gently but deeply, the entire length of the spinal column, being very particular and thorough in all regions which are in the least sensitive to the touch; endeavoring in these regions to discover muscles in a contracted, cord-like condition, which are obstructing the circulation, and thereby affecting nerve-centers which control the alimentary canal. Such muscles must be kneaded and manipulated very thoroughly. Treat opposite side in a similar manner.

"2. Place the patient upon the back; the operator grasping the shoulders, an assistant now grasps the patient's ankles, and a very thorough extension of the spine is given; pull gently at first, gradually stronger, the patient relaxing all muscles, for two minutes (cut 23). Care must be exercised, in giving this extension, to make it no stronger, but just as strong as the patient can conveniently stand. This thorough extension of the spine relieves the pressure upon the intervertebral fibro-cartilage, thereby relieving, in a measure, any undue pressure upon the spinal

nerves, and also freeing the circulation to the cerebro-spinal cord, any obstruction to which means disease in some of its varied forms.

"3. Place one hand under the chin, the other under the occipital bone (cut 8), and give careful extension of the neck, pulling gently until the body moves.

"4. Place one hand under the chin and draw the head backward, rotating it from side to side with the disengaged hand **manipulate the muscles immediately over the pneumogastric nerve**. It is also well to manipulate all the muscles of the sides and front of the neck in a very thorough and careful manner, as this treatment **not only frees and stimulates the pneumogastric**, but **also frees the blood-supply to the head**.

"5. In all cases where constipation is present, beginning at the cecum, manipulate very deeply and gently, following the colon its entire length, endeavoring to move any hardened lump of feces toward the rectum. Manipulate the small intestine carefully and thoroughly (cut 17).

"It is also well, in constipation, to knead, as much as possible, the gall-bladder, endeavoring to empty its contents into the duodenum.

"6. Flex the limb against the abdomen strongly; while in this position, move the knee three or four times from side to side, giving quite strong abduction; extend the leg with a light jerk. This treatment stretches the adductor muscles of the thigh, thereby freeing the circulation to the leg, and assisting to equalize the same. Treat the opposite limb in a similar manner.

"7. Place the hand upon the ribs over the liver; press gently at first, gradually increasing the strength, until the ribs are pressed strongly downward upon the liver; relax the pressure gradually. This operation should be repeated two or three times each treatment, as it assists very materially in stimulating the liver to correctly perform its allotted task.

"8. Place the fingers of the right hand under the ribs, immediately over the liver (cut 25); with the left hand grasp patient's right wrist and draw the arm strongly above the head; at the same instant, with the right hand, raise the ribs as much as possible, off of the liver.

"9. Place the hand lightly over the liver; vibrate gently two or three minutes.

"10. Place the patient upon a stool; with the thumbs close to the spine, at about the second dorsal, have an assistant raise the arms high above the head, as the patient inhales, filling the lungs to their utmost capacity; press hard with the thumbs, as the arms are lowered with a backward motion, patient permitting the elbows to bend (cut 24). Repeat this operation, moving the thumbs downward each time to the next lower vertebra, until the eighth dorsal vertebra is reached.

"This treatment will occupy about twenty minutes, and should be given each day. Immediate results can be expected, and a speedy cure will be effected, if this treatment is given in a correct and careful manner.

"HEPATIC CONGESTION (Excess of blood in the liver, from obstructed circulation.) "SYMPTOMS

"Weight, and dull pain in the right hypochondrium; tongue coated; anorexia; headache; vertigo; digestion impaired; and there may be pain in the right shoulder.

"TREATMENT

"1. See Acute Lithemia.

"2. Place the hands on the sides of the neck, the fingers almost meeting over the spinous processes of the upper cervicals; tip the head slightly backward, pressing gently with the fingers three or four minutes upon the vaso-motor.

"CATARRHAL JAUNDICE (Inflammation and obstruction of the gall-duct.) "SYMPTOMS

"They are similar to moderate jaundice, usually following an attack of acute gastritis. The onset is attended with chill and fever, headache and vomiting.

"TREATMENT

"See treatment for Acute Lithemia, which should be given in a very careful manner, particular attention being given to manipulating the liver and gall-bladder." (*Osteopathy Complete*, Elmer D. Barber, D.O., 1898)

"The speaker has been successful in the treatment of the **worst types of congestive headaches**, by **treatment of the dorsal spine**. In many cases no other treatment being needed than a strong **inhibition of the splanchnics**. The explanation is this: Excessive tonicity of the constrictor fibres of the abdominal blood vessels was forcing blood from these areas to the head, where for the time being the blood was engorged. Inhibition relieved this influence, relaxed the constrictor fibres, and blood pressure in all parts of the body assumed normal relations. **Those who insist upon a dorsal osseous lesion being the first cause may say that a cure can only be effected by its removal. Granting this, it may be some time before such lesion can be corrected. Were it possible to reduce it at once it might be hours, days or weeks before the general tone would be restored to the blood vessels - meanwhile the patient is suffering**.

"Inhibition must take its place as an independent factor in the treatment of congestive headaches." (*Stimulation*, LesLie E. Cherby, D.O., 1905)

"In dealing with congested areas, whether about sprained joints or in **congested headache**, or in enlarged lymphatics, one part of the osteopathic treatment comes so near to being identical with massage that the difference is often overlooked. It is probable that the distinction is not always clear even in the minds of osteopathic practitioners. The theoretical difference is this: The masseur aims "to force the effete products of inflammation into the open mouths of the lymphatic vessels." **The osteopathist aims to "open the circulation" by relaxing contractured muscles and separating the bones, and by this means to allow the circulation to remove the congestion**. No doubt in practice this often becomes a distinction without a difference, but of the two courses only the latter is wholly consistent with the osteopathic ideal of simply opening the way for nature to do the work." (*Systems Of Mechanical Therapeutics: A Comparative Study*, Fred J. Fassett, A.B., D.O., 1904)

"CLASSIC TREATMENT FOR HEADACHES.

"While pressing firmly with one, hand on each side of the spine, about an inch from the middle line, and close up to the skull, make counter pressure on the temples with the other hand. Hold firmly for two minutes, rest a minute and repeat two or three times." (*The Household Osteopath*, Francis J. Feidler, D.O., 1906)

"HEADACHE.

"There are **many causes for chronic headache; eye strain, constipation, female diseases, indigestion**, etc.; and these diseases must be cured before a permanent cure of the headache can be made.

"An acute attack is usually due to a congestion of the blood vessels in the head, caused by muscular contractions in the neck, from a cold, or otherwise.

"The following treatment will usually give relief in a few minutes.

"Thoroughly relax the spinal muscles between the shoulder blades, fig. 31; back of the neck, fig. 13, particularly close up to the skull; under the car, fig. 12; and jaws, fig. 19; inhibit the superior cervical ganglion, fig. 15; inhibit the supra orbital notches, fig. 5; treat the temples and forehead, fig. 7; free the circulation to the head, fig. 78; inhibit by a steady pressure for two minutes, where indicated by the fingers of the upper hand in fig. 32; give a slow, deep kneading of the abdomen, fig. 53; and finish with the classical treatment, fig. 3. If there are hot or tender spots on the head, give treatment, fig. 8. Have the feet hot to the knees. Outdoor life with the head protected from extreme heat of the sun is very beneficial." (*The Household Osteopath*, Francis J. Feidler, D.O., 1906)

"DYSPEPSIA, INDIGESTION, GASTRITIS, CATARRH OF THE STOMACH, ATONY OF THE STOMACH, DILATION OF THE STOMACH.

"The cause of any of these diseases is excessive work inflicted upon the stomach by deviations from the normal diet as regards quantity, quality, or mode of preparation. Habitual overeating; incomplete mastication; hasty eating, especially of vegetables; indigestible foods; excessive drinking, by adults, of beer, liquors and milk; and improperly cooked foods. The propelling power of the stomach may also become weak from other causes, heredity, injury to the spine, sedentary habits, fevers, injury to the nerves of the stomach, impediment to the blood supply, cancers, tumors and ulcers. The result being a lack of power on the part of the muscular walls of the stomach to churn and propel the contents forward into the intestines within the normal time. The delay causes the food to ferment and dilate the stomach more. If this condition is long continued, the stomach becomes gradually weaker, flabby and loses its power of contraction to a great extent, until even a light meal cannot be taken care of by the exhausted stomach.

"The symptoms are, nausea, perhaps vomiting, appetite seems good before a meal but is soon gratified. There follows a dragging, uncomfortable feeling m the stomach sometime after a meal.

"There may be **headache**, insomnia, belching, constipation and emaciation."

"Give a general spinal treatment, fig. 37, on both sides: lift the opposite sides of the spine, fig. 38, on both sides; give an extra good, rapid treatment for the stomach, fig. 32; spring the upper spine, fig. 44; strongly inhibit the vagus nerve, on the left side only, fig. 21; spread the ribs, fig. 28; inhibit the phrenic nerve, fig. 14; give the swinging treatment, fig. 46, from the waist to the shoulder blades; knead the stomach with a rapid movement, fig. 54; shake the liver, fig. 55 and the spleen, fig., 57; treat the gall bladder, fig. 56; treat the appendix, fig. 58; treat the sigmoid, fig. 59; and finish with the spinal tonic.

"Treat daily for a week; afterwards only every other day.

"Sleep on the right side. Abstain from all foods for two days, then begin with liquid foods, broths, strained soups, skimmed milk, etc., eating very little at a time, but eating several times each day.

"Ascertain what food does not disagree with the patient and feed that one kind only in very small quantities at first, and be sure that it is eaten slowly and well masticated.

"Do not worry if the patient does lose a little weight. He will remain it later.

"After two or three weeks, the patient may try a little custard, eggnog, well-cooked rice, and gradually add other bland, non-irritating, and easily digestible food to his menu.

"Acute cases are cured in two or three treatments. Chronic cases require from one to three months.

"If there is constipation or diarrhea they must be specially treated." (*The Household Osteopath*, Francis J. Feidler, D.O., 1906)