

The Osteopathic Treatment of Asthma (1960)

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The osteopathic treatment of asthma is divided into two parts: First, what the patient does for himself, and second, what the osteopathic physician does for the patient. These are subdivided as follows:

1. The patient's responsibility entails:

- (a) Rest,
- (b) upper thoracic friction,
- (c) diet,
- (d) breathing exercises,
- (e) elimination,
- (f) avoidance of air-borne irritants.

2. The osteopathic physician's responsibility entails:

- (a) Alignment of upper thoracic vertebrae,
- (b) freeing of the fourth and fifth ribs on both sides,
- (c) ventral technic to free diaphragm,
- (d) alignment of the occiput,
- (e) cranial flexion,
- (f) inhibition between the fourth and fifth thoracic transverse processes.

PATIENT CAN HELP HIMSELF

Since asthmatics are apt to be excitable above the average individuals and the paroxysms of asthma are very exhausting, **rest is more essential to asthmatics than to other persons**. As a rule they do not want to rest, especially between attacks, so we must be very definite about this and see to it that they do. The minimum time that they should spend in the horizontal position is 9 hours out of each 24. This need not be taken all at one time, but it is better to make it 10 hours a day than 8.

The patient should, morning and night, take **a bath towel, or friction brush, and use friction much as he would in drying between the shoulders except that the friction should be continued about twice as long as it takes to dry the skin**. The idea was given me by Dr. S. C. Edmiston. He believes that a chief cause of asthma is found in a poor or lazy skin and that an important part of treatment is to restore a normal skin function; this can be done in many ways. Friction alone may do it, loosening up the shoulder girdle and stimulating the cutaneous nerves along the spine manually may do it.

It has seemed to me that whether the skin allergy test registers positive or negative to **wheat, it is a good thing to eliminate this item from the diet**. For many years I have used rye-krisp or rye hardtack in place of bread for asthmatics, and asked them to eliminate wheat in every form. I am convinced that it helped to modify the severity of the asthma in 3 cases where this was done after the usual procedure failed to give as good results as we had hoped for. Few patients will completely cooperate in this, and one must be constantly checking to see that the orders are being carried out. An elimination diet consisting of Pluto water and nothing but fruit for 3 days is sometimes used. Following this I add one item at a time until a food causes asthma. This may be more accurate than the usual scratch tests.

Some asthmatics use practically no diaphragmatic breathing. These persons should be taught to place the hands on the lower ribs and move these ribs medially as far as possible, then inhaling to push them out as far as possible. This should be done as an exercise morning and night. One can start with six inhalations and six exhalations and, depending upon the reaction, can increase the number gradually until each period of exercise consists of twenty-five.

Free elimination from the bowels should be encouraged, not by cathartics but by enemas, using either oil retention or plain water enema. Copious water drinking will often help a sluggish bowel. Cathartics should be avoided; I am sure there are few people who cannot control their bowel elimination by drinking water. Hot fruit juice drinks is another good way to normalize bowel activity.

Air-borne irritants are certainly a factor in certain cases of asthma. The source of the specific allergen that starts an attack is often found in horses, cats, dogs, canary birds or other animals or birds. Plant life also comes in for its share as an exciting cause. House dust, mattress dust and pillow dust should be carefully checked. If an air-conditioned room is available the patient can readily be placed where air-borne irritants may be eliminated. It has been my experience that with a proper manipulative and hygienic regime instituted, that the air-borne irritants become less of a factor.

OSTEOPATHIC CARE IN ASTHMA

The alignment of the upper thoracic vertebrae may be done in any one of a number of ways. Nearly all of these cases present a segmental break at the fourth-fifth thoracic articulation. The upper four vertebrae side-bend to the left as a segment with the spine of the fourth rotated toward the right and the body of the fourth side-slipped to the right on the fifth. The first, second, third and fourth thoracic vertebrae seem to move as a unit as their spinous processes are in alignment while the spinous processes of the fifth, sixth, seventh and eighth are also aligned but at a different angle. It has been my custom to place the patient on the table face down, but on his elbows, with the forearms lying out in front of him parallel to the table. The points of the elbows should be far enough forward so that the upper arms are at a right angle with the table, or slightly in front of that point. This position suspends the spine in a hammock of muscles, and cannot hurt the breasts or sternum. I stand at the side of the table so that I face his left side. I place my right hand on the spine in such a way that the knuckle of the middle finger is on the right transverse process of the fifth thoracic vertebra and the heel of my thumb on the left transverse process of the fourth. My left hand is on the top of the patient's head, which is in easy flexion. I do not place my left hand in a position near the back or crown of the head because it is not desirable to get forced flexion of the neck. My body is equally placed between my two hands and I lean down so as to get my shoulders in a mechanically easy position to approximate my two hands. I rotate the patient's face slightly to the right and sidebend the neck and upper four thoracic vertebrae to the right. In this position I am ready to use a quick, light thrust approximating the two hands. I may at times just use a strong, slow effort to approximate the hands. The pressure on the transverse process of the fifth drops it from under the fourth permitting the fourth-fifth articulation to side-bend to the right. The pressure on the transverse process of the fourth helps to drive it upward and aids in realigning the segment. If I am not adept enough to make the correction in this manner, I may use the following method:

The patient stays in the same position. I place the pad of my right index finger over the left, and the pad of my right middle finger over the right transverse process of the fifth thoracic vertebra. I then place my left forearm (close to the elbow) over these fingers and I use a quick thrust with my left arm in a 45 degree angle toward the table and toward the head. With the patient in the same position, I draw the angle of the fourth right rib down and push up the angle of the fifth. I reach around in front with my left hand and find the front end of the fourth right rib so that I can raise it as I lower the angle. I reverse this process for the fourth and fifth left ribs, separating them at the angles instead of approximating them as shown for the right side. Either in this position or with the patient sitting up, I make sure that the front ends of the ribs are perfectly spaced.

Ventral technic in asthma is designed chiefly to increase the flexibility of the diaphragm and lower ribs. Often these patients have a big barrel-shaped chest but the lower ribs are drawn in and there is very little expansibility. In adjusting that region I have the patient lie on his back, with knees up, and I place my thumbs low on the sides of the ensiform cartilage, with my fingers resting over the lower ribs.

On deep expiration I sink my thumbs into the muscles of the abdomen as if I were helping to push the diaphragm cephalad. At the same time my fingers over the lower ribs press medially. On inspiration my hands remain in the same position, but my pressures are transferred to the palms and heel of my hands as I help the ribs flare laterally and raise them a bit. Care must be used in these technics because a slip of the thumb on expiration, or the hands on inspiration, may cause a skid over the cartilages resulting in a painful bruise or possibly a costochondral separation. I have had one or two accidents of this nature, but none where the tenderness lasted over 3 or 4 weeks.

Each osteopathic physician has his own methods of adjusting the occiput. I have usually found the position of this bone to be one of extension on the atlas on the right. This is what is spoken of as an anterior occiput (rt.). According to the Standard Osteopathic Nomenclature it would be designated a combination of an extended, and a lateroflexed and rotated occipito-atlantoid lesion. I use different methods to lift the occiput, and draw it back on the right.

The film, "Anterior Occiput," available from the American Osteopathic Association, goes into detail on my usual procedure.

Cranial flexion. -Cranial technic is so difficult and complicated that it is wise to take a course specially designed for cranial work, but if the physician depends upon respiration rather than applied force for the adjustment there is no harm in trying simple flexion of the cranium. Dr. Sutherland thinks that all asthmatics have the cranium fixed in extension. That is, both greater wings of the sphenoid are up and the occiput is up. In thinking of these movements one must of course think in terms of infinitesimal strains. When one gets used to the feel of a cranium that is locked, and one that is not, it is not too difficult to tell which condition exists. To this day, however, there are many cases that I cannot be positive about.

I try to bridge the frontoparietal suture line to have my left thumb on the right greater wing of the sphenoid and my ring finger or middle finger on the left greater wing. My right hand cradles the occiput from right to left with the occipital protuberance cupped in my palm near the little finger border. I hold the cranium thus in easy flexion using traction downwards towards the feet on the occipital protuberance and holding the greater wings of the sphenoid downward (toward the chest, not toward the table). The patient is then asked to breathe deeply either by stepped-up breaths or one continuous breath and to hold as long as he reasonably can. Usually just as he starts to let his breath out, one can feel an infinitesimal give.

There is, of course, not as much motion as in a sacroiliac when it lets go, but there is the same sense of relaxation, and if the suboccipital muscles are palpated before and after, one can tell whether or not the cranium has unlocked for if it has these muscles will feel more nearly normal in texture.

I like to set the patient up at the end of these manipulations and place my fingers over the first ribs and my thumbs between the transverse processes of the fourth and fifth thoracic vertebrae. In this position I use deep pressure through the fingers and thumbs for about 2 minutes. This pressure alone in an acute attack is often effective.

For best results I treat asthmatics once a week for 1 or 2 years. It may be discouraging but the outcome is usually worth the time, effort and cost.