Plummer Needed: OMT for Sinus Problems
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Outline

• Anatomy
• Causes
• Symptoms
• OMT
• Demonstration
• Treatment options for patients/self-care
• Open Discussion
Sinus cavities take up about a third of the skull. Air is brought into the sinus cavities, cleaned of dust and harmful bacteria by the cilia and mucus of the nasal passages, humidified, and then sent to the lungs. Because the single exit from the sinus cavities is tiny, only about as wide as the lead in a pencil, it's relatively easy to clog it.
• When mucus becomes thick, either in response to a cold or an allergic reaction, the single exit from the sinus cavity becomes blocked and the mucus builds up
• The sinus cavity is the perfect place for virus, bacteria & fungus to thrive until you have a full-blown, painful, congested sinus

It’s a Plumbing Problem
• Several of the sinuses open up to the nasal cavity through a narrow channel at the top of the sinus.
• If you look at plumbing, the drain is always at the bottom. With a sinus infection there is a need for the congestion to drain out of an exit – a narrow exit that becomes blocked easily but also the stuff trying to get out has to get to the TOP of the sinuses.

Importance of Movement
• Immobility of the joints of the head and face will most definitely impair movement of the lymphatic system and thereby the body’s ability to clear the sinuses
• The movement of the skull and facial bones is analagous to the movement of the ribcage during respirations
• Although joint movement in the head is much smaller than that of the chest, the rhythmic “breathing” of the head helps to move mucus through the head, into the neck, down through the chest and into the liver where toxins in the mucus are processed and eliminated
What causes sinus congestion, headaches, and infections?

- Dehydration
- Caffeine
- Alcohol
- Lack of sleep or rest
- Weakened immune system
- Dry and/or cold air
- Sudden or extreme changes in temperature

Symptoms

- Congestion and pressure
- Yellow, green, gray nasal discharge
- Facial pain
- Headaches
- Fever
- Sluggish and fuzzy
- Upper jaw and tooth pain
- Decreased hearing
- Dry blood in the nose

Virus, Bacteria, or Fungus

Antibiotics should be reserved for those situations which do not respond to conservative measures, when there is a fever, swelling and increasing pain, swelling or pressure in the face over the sinuses.

CT Scans of sinuses should also be reserved for chronic, persistent, resistant cases of sinusitis.
Sympathetic Innervation

- T1-4
- T1-6
- T5-9
- T10-11
- T10-12
- T12
- T12-L2
- T2-8
- T11-L2

- Head and Neck
- Heart and Lungs
- Upper GI (T5R GB, T6R ducts, T7R pancreas, T7L spleen)
- Lower GI (SI, R colon, gonads, adrenals, upper ureter)
- Kidneys
- Appendix
- L colon, lower ureter, bladder, uterus, prostate, genitals
- Arms
- Legs

Parasympathetic Innervation

- Vagus
- S2-4

- All structures in head, neck, heart, lungs, kidneys, upper ureters, entire GI tract down to mid-transverse colon
- L colon, lower ureter, bladder, uterus, prostate, genitals

Lymphatics

- Head and neck drain to R thoracic duct (mostly), some to the L thoracic duct
- Heart and lungs drain to R thoracic duct
- Rest of body drains to L thoracic duct

Superficial Cervical Lymph Nodes
What the Osteopath Can Do

• Since this is a plumbing problem—a mechanic drainage blockage—we can use OMT/OMM to stimulate the immune system—affect directly the lymphatics of the face, neck, thoracic and rib cage/chest wall.

Effleurage or Drainage Techniques

• Use for sinus congestion, eustachian tube blockage, general nasal drainage, and this will also help drainage from head in general.
• Effleurage is defined as “stroking movement in massage used to move lymphatic fluids.”
• Inflammation, swelling of the mucosa, excessive mucus production, and decrease of ciliary motility can all be positively modified by this technique.
• Whether the cause is allergic or infective, effleurage will promote lymphatic drainage.
Facial Effleurage

- Moves interstitial fluid of the soft tissues of the face into the superficial lymphatic drainage
- Place the pads of your thumbs or index fingers bilaterally over the forehead.
- Apply light pressured stroking from middle outward and downward to collar bones.
- Repeat steps one and two over the cheeks, under the nose and chin.

Cervical Effleurage

- The facial treatment is followed by effleurage of the anterior cervical chain (from behind the ear along the neck to the clavicle) towards each lymphatic duct/ clavicles and ultimately the heart
- Benefits are increased rate of superficial circulation of venous blood and lymphatic fluid and stimulates drainage of ears, nose and throat.
Rib Mobilization

• Indication: Lymph drainage, otitis, sinusitis, rhinorrhea, pharyngitis, influenza, asthma, pneumonia, visceral disease to lower sympathetic tone, help mobilize spleen and liver bilaterally

Rib Raising in Young Children

Rib Raising

• Indication: Lymph drainage, otitis, sinusitis, rhinorrhea, pharyngitis, influenza, asthma, pneumonia, visceral disease to lower sympathetic tone, help mobilize spleen and liver bilaterally

Rib Raising in Young Child

• Patient: Seated facing away, towards parent or someone who can distract child

Doctor: Seated behind patient, thumbs at rib angles bilaterally, start at lower ribs and work slowly up toward top of ribcage until all ribs are mobilized. Special attention to posterior ribs and transverse processes are important and there may be a group area of ribs which is more posterior in the lower ribs indicating a tight diaphragm on this side.

Hand action: Simultaneously move hands medial and lateral with thumbs putting pressure on the rib angles rapidly at about the speed of the breathing. You are augmenting the breathing. It is okay if it is not synchronized with the breathing, it can be faster or slower. Do the whole rib cage both sides until there is improved motion. Time involved would be two to six minutes, depending on the need.
From: Osteopathic Manipulative Treatment of a 26-Year-Old Woman With Bell’s Palsy


To perform thoracic outlet release, the osteopathic physician’s thumbs are placed in the patient’s supraclavicular fossae, and pressure is applied in a caudal and lateral vector until release is felt.

Figure Legend:
To perform thoracic outlet release, the osteopathic physician’s thumbs are placed in the patient’s supraclavicular fossae, and pressure is applied in a caudal and lateral vector until release is felt.

Pt/Self Care Treatment Options

- Rest
- Plentiful water, fluids (chicken soup, herbal teas)
- Breathe moist air
- Direct warm compresses
- Nasal rinse
- Decongestants
- Avoid common irritants

What NOT to do for sinusitis

- Rest
- Plentiful water, fluids (chicken soup, herbal teas)
- Breathe moist air
- Direct warm compresses
- Nasal rinse
- Decongestants
- Avoid common irritants

References

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