



The nose knows

Correlations between paranasal sinus diseases and digestive organs

by Dr. Kirk Slagel



Development of the paranasal sinuses

The bones of the face house a unique set of cavities called the paranasal sinuses. These sinuses are found in the interior of the four facial bones: the maxilla, frontal, sphenoid and ethmoid. They form air chambers, which serve to lighten the skull, moisten the air we breathe, add distinctive intonation to our individual voice, and facilitate the movement of irritating debris along the sensitive mucous membranes that line them.

The paranasal sinuses are laid out in the 2nd to 4th months of pregnancy. The actual development and *epithelial lining* take place after birth. Around the 6th year of life, stronger growth begins, while the final extension is reached only after puberty. Individually, the formation of the paranasal sinuses fluctuates strongly, and even in a single person, it can differ widely between the two sides.

Although e.g. the maxillary and ethmoid sinuses are present at birth, they develop to their full extent only as a person reaches early twenties. The ethmoid labyrinth also continues to grow as the person ages and generally expands above the orbital of the eye to form the frontal sinuses, located just superior to each eyebrow. This bilateral development process is not always complete however, and many people have only a single, unilateral frontal sinus. A small percentage of people do not develop frontal sinuses at all.

Function of the paranasal sinuses

These internal air passages located

on either side of the nose and forehead are used, on average, over 20,000 times daily. The membranes consist of ciliated respiratory epithelium-special mucous producing columnar cells that are covered by minute finger-like projections. With all of this exposure, the tiny cilia, like undulating grasses of the sea, sweep the mucous and any debris contained within it toward the nasal openings, the nares, and the posterior nasopharynx, where it is either discharged, or swallowed.

Paranasal sinus diseases

The draining of the sinuses occurs through an aperture in the membranes. If this aperture gets blocked from irritation, congestion, or inflammation, the mucous flow is obstructed and resultant pressure develops. The individual now has what is commonly referred to as **sinusitis**. Often, the obstruction is associated with a viral, bacterial, or fungal origin. In fact, recent studies have shown that many sinus infections are actually fungal in nature. However, the sinusitis may also be caused by an allergy to an external foreign substance; be it directly inhaled through the nares, or as a secondary reaction to a food or from poor digestion. This gut association often has much influence on the state of the sinus mucosa.

Correlation of paranasal sinuses and intestine

If we consider the gastrointestinal tract to be the primary mucosa, then all other mucous membranes outside of the gut are secondary mucosa.

This correlation has been observed from a clinical stand-point in that many patients with sinus, respiratory, or vaginal conditions, often have some form of gut dysbiosis.

This sequence is relevant in that the gut is the seat of a significant immune response network. Sixty to seventy percent of the lymphoid tissue is located in the wandering maze of the small intestine and abdominal area. The inner exposure to the outside world at birth was in the form of foods eaten and air breathed. In addition, numerous animate and inanimate objects may have found their way to the always-receptive toddler's mouth. Immunologically, the production of a significant immunoglobulin, IgA, exists on these mucous membranes as a first line of defense to external foreign substances. By marking these foreign substances as they enter the body and following the cascade through to the development of immune memory cells, each person begins the lifelong process of protection against certain external substances.

The Autonomic Nervous System: calming Parasympathetic, and reactive Sympathetic, supports the delicate balance of stress management and digestion. And, the digestive process is of paramount importance in the health and well being of a properly functioning immune system. Digestion is best served in a parasympathetic mode: a soothing, calm, peaceful environment whether one is a vegetarian, vegan, or meat eater.

Depending upon one's personal belief system these quantities vary,



but across the table foods eaten should be an unadulterated blend of healthy fruits, vegetables, grains, nuts, seeds and meats. Foods need to be well chewed to allow for maximal association with the mechanical mastication process and exposure to digestive enzymes.

Quite simply, the gut works in parasympathetic mode. The production of acid, enzymes, and gut motility depend upon it. However, with many people stress is nearly always present. This short circuits the digestive process and results in undigested materials being introduced throughout the gut, depending upon the availability of enzymes. As a result, foods ferment, putrefy and rancidify, thus irritating the intestinal and allowing many large molecules of foods to enter the GI tract as an oversized foreign substance rather than a minute usable food source. The immune system is activated. Histamine, from degranulating MAST cells located throughout all of the mucous membranes, including the sinuses, is released and the immune cascade begins.

Over time the body becomes sensitized to these various materials. If the gut is constantly inundated with foreign substances then the overall immune system becomes irritated, inflamed, and overly sensitive to large molecules, whether eaten or inhaled. Accumulated debris from breakdown and elimination of foods and metabolic materials gets stored within the body. The sinuses and respiratory system, also responsible for the elimination of wastes, becomes reactive to the

histamines and congestion from substances that ordinarily would not cause a reaction. The body must rid itself of the offending stored material and one pathway is via the sinuses through a reactive, eliminatory immune cascade.

One can see that the relationship to foods, stress, and health is of paramount importance. This is true not only to obtain the nutritional benefit of foods, but also for the health of our immune system.

Symptomatology of sinusitis

As this sinus reaction process becomes present, the person may have associated symptoms of headache, pain and/or pressure over the cheeks, inner eye, or forehead. The throat may become irritated as a result of posterior nasal drainage. The voice tone may shift due to the change in density from air to mucous in the sinus cavities. Sneezing, and the blowing of the nose in an attempt to relieve the pressure, is a common pastime of the „nasally challenged“ individual.

General treatment options

Medical treatment for such a condition is varied and at times perplexing. Standard medicinal routes of treatment utilizing over the counter, or prescription anti-histamines and decongestants generally only palliate symptoms. One may get relief, but it is usually short-term with recurrent symptoms returning in a matter of days or weeks. Some individuals seem to just continue to use these medications not unlike a general daily vitamin regimen. As a society we have even gone so far as to advertise the approaching „allergy

season“, associated with sinusitis, sneezing, etc.

The sinus elimination process starts with the digestion. By treating it at this point, one may eliminate the very cause of the chronic sinusitis. Consume foods that are healthy. During the illness eat no, or very lightly of proteins, carbohydrates and sugars, meats, grains and fruits. Steamed vegetables, broths, vegetable juices are always recommended. Basically, allow the body to eliminate by reducing the metabolic load.

Depending upon the state of the sinusitis, some physicians even recommend a fast of certain duration, but this author recommends that a fast only be undertaken with medical supervision. Although the missing of several meals during an illness, as long as there are adequate fluids consumed, is usually of no consequence.

Recommendations for the patient:

- Drink copious amounts of fluid, approximately 30 ml per kilogram of body weight is a good general guideline; more if exercising or a dehydrating environment is present. Monitor one's pH through urinary assessment with pH paper.
- Consume foods that will shift the pH toward 6.8 to 7.2; if too alkaline eat acid foods, and vice versa. Rest as much as possible, particularly being in bed prior to 10 p.m. It is said, that every hour one gets before midnight is equal to two after midnight.



Additional therapies may be of particular interest as they act directly on the affected area. An old, time-tested process is the use of the **Neti Pot** to physically flush the sinuses. This is a small ceramic pot with a narrow outlet. One merely fills the pot with clean, warm water, often with a pinch of sea salt, and by tilting the head back and to the side, administers the solution via one nostril. The water should exit the other nostril. When infections are present, one may add small quantities of antibacterial herbs to the solution, or make a tea ahead of time that may be used in the pot. (Be sure to allow for cooling...)

Other therapies include: sinus packs of warm towels; inhalations steams with a drop of an essential oil, such as Peppermint - to assist with decongestion; Thyme or Rosemary - as an antimicrobial; Cervical manipulation has been helpful. Orthomolecular support in the use of Vitamin C, Zinc, A, and other supplements contributes to the immune function and general metabolism. Diathermy, homeopathy and acupuncture have also all been found to be of benefit.

Causal therapies

However, there are alternative treatment options for those interested in working on the issue a little deeper.

From one standpoint, the sinusitis condition is really an altered localized problem with a possible systemic milieu origin.

The sinus environment and the entire body may be in such a condition of

inefficient elimination at the cellular level that microbes now have found a suitable home. This is the present association with a viral, bacterial, or fungal sinusitis.

So, the goal is to eliminate the external effects as much as possible and to promote elimination. This therapy, along with the other supportive therapies mentioned, supports the person as s/he cleanses and heals oneself. The goal is toward shifting the milieu and restoring a healthy functioning environment, which does not support these pathogens.

These deeper acting therapies include the use of remedies produced by SANUM and HEEL. The overall milieu associated with the diet and/or external toxins must be altered. As one changes the diet, however, there may be a milieu present that has been affected by any invading pathogens. Many microorganisms create their own milieu to support the environment in which they live. Oftentimes, one needs assistance in supporting the shift in the milieu. As one monitors the pH, additional remedies are available to support the return of a normal, healthy pH. Within the line of SANUM products, there are four pH modulators. These include ALKALA and potency chords of CITROKEHL, SANUVIS and FORMASAN. (A potency chord is a combination of several different homeopathic dilutions of the same substance in one remedy.)

The pH modulators, taken orally, facilitate the shift of the pH. This is critical in setting a new foundation to eliminate the debris that is

associated with the sinusitis.

ALKALA used daily assists in alkalinizing the fluids of the body. If the patient has an acid urinary pH, then ALKALA taken in warm water between meals will greatly assist the shift of the pH.

CITROKEHL (Citric acid) can be very beneficial at the cellular level in supporting the citric acid cycle. Stimulating cellular activity assists with the removal of wastes via improved cellular function. Citric acid is also a supportive pH modulator when treating the *Aspergillus niger* (NIGERSAN) conditions of the body. These include any tubercular, or para-tubercular illness.

SANUVIS is a potency chord of L+ lactic acid. As the body becomes more congested, cellular function is inhibited. As such, metabolic debris accumulates disturbing the general well being of the entire organism. SANUVIS assists in removing this toxin by stimulating the elimination of lactic acid. SANUVIS also supports the general circulation. If there is congestion, then there is most likely a circulatory impairment associated with *Mucor racemosus*. This tends to perpetuate itself toward the build-up of lactic acid and further reduced cellular function. The therapeutic means of choice is MUCOKEHL.

FORMASAN is a potency chord of formic acid. Formic acid has its indications for asthma and bronchitis, among others. It regulates the body's milieu in viral, bacterial, and fungal conditions of the body.



FORMASAN supports the use of NOTAKEHL, QUENTAKEHL, and FORTAKEHL. FORTAKEHL is the beneficial remedy in restoring gut microbial foundation.

The gut lymphoid tissue is a key component to the immune system. It can be supported by use of the preparation REBAS, which consists of Peyer's Patches extract.

In addition to the general milieu therapy, in order to treat sinusitis successfully the appropriate isopathic/homeopathic SANUM preparation has to be used. PEFRAKEHL (*Candida papasilosis*) for suspected sinusitis may be administered in the drop form via the nares. Simply lie in a supine position and drip 3-5 drops into each nostril daily.

The use of NOTAKEHL may be beneficial for a sinusitis of bacterial origin. NOTAKEHL may be used in combination with, or separately from PEFRAKEHL. A mixture of PEFRAKEHL 1 ml, NOTAKEHL 1 ml and Procaine 1-2 ml may also be used in a like manner. Administer (needle removed), one-half of the quantity in each nostril.

Adding the immunomodulator REARCIN, may offer localized and systemic immune modulation. Administer 3-5 drops in each nostril up to 2x weekly.

Nasal lavage

The sinuses may be directly treated via several techniques employed by Dr. Thomas Rau, Medical Director of the Paracelsus Clinic in Switzerland, Dr. Konrad Werth-

mann, Senior SANUM instructor from Austria.

Dr. Rau uses a combination of the SANUM remedies NOTAKEHL, RUBERKEHL and FORMASAN, combined with the HEEL remedies Traumeel, and Mucosa Compositum.

Dr. Werthmann uses the following blend of remedies: NOTAKEHL and FORMASAN, combined with Psorinoheel, Mucosa Compositum, and Injeel (as required) by HEEL and adding physiological saline solution (*see also „Treatments for Allergies and Chronic Disorders“ by Dr. Konrad Werthmann*).

The therapy is generally a sterile ampule of each combined in a syringe and applied to each sinus. This technique requires that the patient lay supine, with the head tilted backwards slightly. Slowly, one-half of the contents of the syringe (with the needle removed), is slowly administered to each nostril. It is very important to allow the solution to run slowly along the nasal septum of the treated side. The head of the patient is carefully rocked from one side to the other to let the fluid be distributed in the cavities. Thus, the solution may reach the contorted accesses of the sinuses, and the remedies can release the secretions and at the same time support the mucous membrane regeneration. This process takes 5 to 10 minutes. This kind of treatment is easily done at home either by the patient or with the help of another person. Alternatively, the patient may inhale the solution slightly to

draw the remedies deeper into the sinus cavities.

The use of the above nasal lavage is an effective addition to the special forms of therapy.

The SANUM and HEEL remedies have specific action that when used in combination with body-wide support lead to a greater chance of successfully treating the sinuses. These therapies may also be blended with Procaine 1-2 ml, to provide the added benefit of Procaine therapy.

Chronic sinusitis is often only a symptom of other imbalances within the body. It is recommended that the practitioner look closely at any chronic sinus condition with the intent of determining whether it is a local or systemic problem. The diet has much to do with many illnesses. Sorting out the causative agents may take time and persistence, however the final reprieve from this annoying condition will be well worth the effort.

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