

### **Sinusitis and Sinus Congestion**

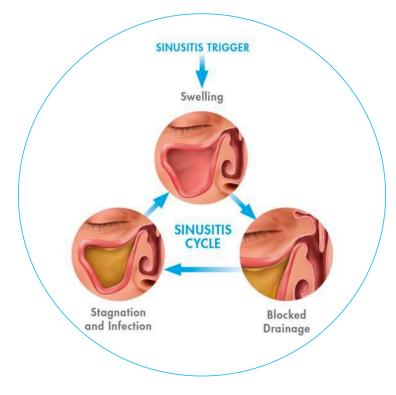
The sinuses are air-filled spaces in the skull. They are located behind the forehead, nasal bones, cheeks, and eyes. Healthy sinuses contain no bacteria or other germs. Most of the time, mucus is able to drain out and air is able to flow through the sinuses. When the sinus openings become blocked or too much mucus builds up, bacteria and other germs can flourish more easily.

Sinusitis is an inflammation of the cavities within the nasal passages that blocks the drainage of mucus. This blockage does not allow air to circulate and prevents elimination of secretions that are made. This obstruction

creates an oxygen-deprived environment that allows anaerobic bacteria to proliferate and leads to sinus infections. Acute sinusitis, which usually does not last longer than 8 weeks, includes symptoms of facial pressure with discolored mucus and congestion. Chronic sinusitis, which can last years at a time, is due to extremely high levels of longstanding inflammation within the sinuses.

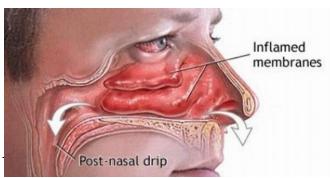
The cause of sinusitis can be narrowed down to a few different factors. Infections are the largest factor and can be caused by bacteria such as *Streptococcus pneumoniae*, or viruses. A viral sinus infection is much more common than a bacterial one. With viral sinusitis, a virus infects the lining of the facial and nasal cavities. It is typically caused by a viral upper respiratory infection.

A bacterial sinus infection is caused by bacteria infecting the lining of the facial and nasal cavities. It is usually caused by a virus first, with the bacterial infection coming later. This often starts in the nasal cavity before spreading to the sinuses



In chronic sinusitis, it is not uncommon to find multiple different types of bacteria making it hard to treat with antibiotics as these organisms may be resistant. The body's reaction to this infection causes the lining within the sinuses to swell. Allergies can also cause sinusitis through irritations from dust, pollen, and fungi within the nasal passage leading to inflammation. Lastly, physical blockage from a growth in the nasal cavity or enlarged adenoids can also cause sinusitis.

In TCM, the inflammation and infection of the sinus is defined as Nasal Heat and/or Heat in the Head and/or Blood.



### Nasal Congestion, Runny Nose and Post-Nasal Drip

Nasal congestion occurs when the nasal membrane lining becomes inflamed leading to blockage due to inflamed blood vessels. Inflammation of the surrounding blood vessels can be caused by viral infections such as colds, the flu, and gram-positive and gram-negative bacteria. Bacterial lipopolysaccharides can irritate the nasal membrane

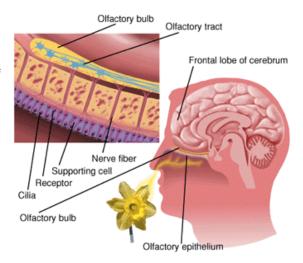
causing the goblet cells to secrete excessive amounts of mucus causing symptoms of a runny nose. Besides bacterial and viral infections, mycobacteria can also infect the nasal passage causing symptoms of post-nasal drip which further causes throat irritation and chronic cough. Infections by fungi can cause severe nasal congestion and the nasal passage to be blocked completely. Patients with nasal fungal infections may not be able to breathe at all through the nose. The mycotoxins from the fungus can also cause irritation to the nerves and patients may experience a dryness burning feeling in their nose even though there is excessive phlegm.

Chronic infections of the nasal membrane can sensitize the immune cells within the nasal passage which upon exposure to allergens including, environmental allergens and food allergens, can produce a severe allergic reaction with symptoms of severe runny nose, sneezing, congestion, throat irritation, and coughing.

According to TCM, the chronic nasal congestion, runny nose and post-nasal drip is condition which not only has Heat but also has deficiencies caused by the Heat. Invasion of the pathogens such as gram-negative bacteria (Damp Heat), virus (Evil Qi), fungus (Heat Toxins or Toxic Heat) as well as mycobacteria (Cold Damp) and chronic inflammation can cause tissue damages and structure degeneration causing further deficiencies.

## **Degeneration of the Nasal Structure**

Chronic inflammation of the nasal passage can cause structural damage including the mucosa lining, the blood vessels and the olfactory nerves in the nasal cavity that participate in sense of smell. Fungal infections of the sinus can also cause the formation of naso-sinus fungal biofilm in combination with tissue ulceration. Patients may experience bloody nose, dry and burning sensation, as well as dizziness, pressure inside the head, and poor balance. The inflammation can also cause malfunctioning of the lymphatic system in the surrounding area. This can cause an accumulation of excessive wastes and patients can lose their sense of smell completely.



#### **Wellness Recommendation**

#### Sinusitis, Nasal Congestion, Runny Nose:

For patients with sinusitis, nasal congestion, and runny nose due to inflammation and infections, Apro is recommended to reduce sinus and nasal inflammation and clear infection by removing the Heat in the sinuses, nasal pathway and head. Apro helps to remove the excessive pro-inflammatory cytokines in the nasal pathway as well as reduce the allergic response. Once the air is reintroduced into the sinuses, the exposure helps to kill the anaerobic bacteria. Patients can experience symptom improvement in 3 days and 1-2 weeks of Apro is required for significant and sustained results.

For patients with seasonal sinusitis and have used Apro during the last allergy season may experience similar symptoms during the next allergy season at less intensity and may need a maintenance dose of Apro to help reduce any sinus inflammation.

If patients are also experiencing allergy related hay-fever symptoms such as itchy eyes, nose, and throat due to Heat in Blood, Bitter is recommended to help cool down the Blood and clear the excess pro-inflammatory cytokines in the blood and relieve symptoms of allergy and sinusitis. For patients who have severe chronic allergies with severe nasal inflammation and excessive mucus production due to Heat in the Blood in combination with Qi and Blood deficiencies, Bitter Plus is recommended and to relieve the allergy symptoms and enhance the immunity to clear the pathogens that trigger the allergic reactions. Patients can experience symptom improvement within 1 day. Mild cases require 3 to 7 days of treatment. Severe cases can require treatment for 2-4 weeks for significant improvement and sustained results.

## Instant symptom relief of Nasal Congestion:

For severe nasal congestion with air way blockage leading to patients having to breathe through their mouth, Apro Nasal Oil is recommended. This externally applied liquid product will allow for quick relief of nasal congestion allowing for easier breathing through the nose.

Millennium is recommended to address post-nasal drip caused by allergies through nurturing the Yin. Patients can experience symptom improvement in 1-3 days and 2-4 weeks is required to have significant improvement and sustained results. If the post-nasal drip still persists due to chronic allergies, they may have nasal passage degeneration. Synogen should be added to nurture nasal passages through improved blood circulation to the nasal cavity by enhancing the Yang.

If the sinusitis, nasal congestion, runny nose, and post-nasal drip are caused by the following infections:

<u>Gram-positive bacterium</u>: For infections of the sinus or nasal pathway by gram-positive bacteria such as <u>Streptococcus pneumoniae</u>, Apro, Bitter, Brown, Qi Booster, and LC Balancer are recommended to address the sinuses and nasal pathway inflammation/infection. They also improve liver function, immune function, and reduce pro-inflammatory cytokines by clearing the Heat in the head and blood, nurturing the liver Yin and enhancing the Qi. Patients can experience symptom improvement in 1-3 days and 1 to 2 weeks is required for significant improvement and sustained results

<u>Virus</u>: Woad, Bitter, Brown, Qi Booster, and LC Balancer are recommended. Woad helps to clear viral infections by removing Evil Qi in the Blood. Bitter, Brown, Qi Booster, and LC Balancer help to improve liver and kidney function, immune function, as well as reduce pro-inflammatory cytokines by nurturing the liver Yin and enhancing the Qi. Patients can experience symptom improvement within 3 days and 2-6 weeks is required to have significant improvement. For patients with chronic viral infections in the nasal pathway, Perilla-R is recommended as the next step to help clear the residual virus in the nasal pathway through removing the Evil Qi in the nasal pathway.

<u>Fungi</u>: For patients with nasal fungal infections with symptoms of nasal congestion, dryness, and burning sensation inside their nose, Wave should be added to clear fungi from the sinuses and open up the nasal passage by removing heat toxins. Patients should experience symptom improvement in 3 days and 4 weeks is required to have significant improvement and sustained results. If the nasal blockage reoccurs, there may be different strains of fungi in the nasal passage and Wave-2 is required.

If there is biofilm formation in combination with ulceration of the lining, Biofilmin and Alpenia-N are also recommended. The biofilmin helps breaks down and dissolves the microbial biofilm in the nasal cavities by clearing the Stasis. Alpinia-N helps repair the tissue damage and remove the necrotic tissue inside the ulcer by clearing Blood Stagnation. Patients can experience symptom improvement in 3-7 days. 10-12 weeks of treatment is required for significant improvement.

<u>Gram-negative bacterium:</u> Irritation by the gram-negative bacteria usually causes excessive nasal dripping. Rhinocin is recommended to clear sinus infections caused by gram-negative bacteria through clearing Damp Heat. Baicalein is recommended to clear infections of the nasal pathway caused by gram-negative bacteria through clearing Damp Heat Patients can experience symptom improvement within 1 day and 4-6 weeks is required for sustained results.

Mycobacteria: Typical symptoms caused by mycobacterial infections of the sinus and nasal pathway is excessive post-nasal drip. The recommendation includes ClearLung, Jade, Java, and NewBase which work in combination to clear the mycobacterial infection by removing Cold Damp toxins. ClearLung helps reduce inflammation in the respiratory tract, including the nasal cavity and removes lung heat. Jade helps increase blood flow to the lungs and enhance the innate immunity in the respiratory tract by enhancing Lung Qi to help clear the mycobacterial infection. Java helps improve lymphatic circulation and clear the excessive waste from the immune response by removing Spleen Damp. NewBase helps calm down the overreacting adrenal and immune system caused by the infection through removing deficiency heat in the kidneys. Patients can experience symptom improvement in 3 days and 3-4 weeks is required for significant and sustained results.

## Hypersensitivity caused by Degenerated Nasal Lining

Cellgen and ZY are recommended to help repair the nasal lining damage and regenerate healthy tissue lining by enhancing Kidney Yang and nurturing Kidney water. Patients can experience symptom improvement in 3 days and 2-3 weeks is required for significant and sustained results. For patients with very severe chronic conditions, Peach is recommended to repair blood vessel damage within the nasal cavities. Deer is recommended to repair the damage to the olfactory nerves in the nasal cavities.

**Protocol Summary** 

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Condition / Complication	Recommendation
Sinusitis, Nasal Congestion, Runny Nose	Apro
Allergy related hay-fever symptoms	Bitter, Bitter Plus
Severe nasal congestion	Apro Nasal Oil
Post-nasal drip caused by allergies	Millennium
Gram-positive bacterium	Apro, Bitter, Brown, Qi Booster, LC Balancer
Virus	Woad, Bitter, Brown, Qi Booster, LC Balancer
Chronic viral infection	Perilla-R
Gram-negative bacterium	Rhinocin, Baicalein
Fungus	Wave, Wave-2
biofilm formation in combination with ulceration	Wave, Biofilmin, Alpenia-N
Mycobacteria	ClearLung, Jade, Java, NewBase
Nasal lining damage	Cellgen, ZY
Blood vessel damage	Peach
Olfactory nerve damage	Deer

#### **Selected Case Studies**

#### Case 1: Successful Symptom Elimination of Seasonal Allergies in One Month

Michael Vahila, Lac, OH

A 62-year-old male patient came to Dr. Vahila with seasonal allergies that developed several years ago. He tried various natural remedies with limited results. When the allergies became severe, he resorted to over-the-counter conventional allergy solutions, which he had to use every day for weeks.

Dr. Vahila recommended Wei Laboratories herbal formulas, Bitter and Apro. The Bitter formula helps reduce high levels of pro-inflammatory cytokines and histamine in the blood. Apro helps clear inflammation and infections in the head including the sinuses, ears, and gums. The patient took Bitter (2 caps 3 times per day) for 3 1/2 weeks and Apro as needed, along with acupuncture when necessary. His symptoms were reduced and became very manageable during this time. He only resorted to over-the-counter medicine once after mowing 3 acres on a high pollen day, compared to once per day before. Since stopping the herbs, the patient still has no symptom flare-up even though allergy season is still in full force. The patient is very happy with the result.

# Case 2: Effective Resolution of Chronic Post-Nasal Drip with Excessive Phlegm

David Lifka, DC, Aurora, IL

Dr. Lifka was seeing three patients all of whom were suffering from chronic post-nasal drip with excessive phlegm production. In some of these patient cases, these issues had plagued them for multiple years. All three of the patients began an herbal regimen from Wei Laboratories consisting of Millennium Capsules. After only 1 week, the symptoms of all three patients improved dramatically. Their post-nasal drip symptoms were gone and the excessive phlegm production was eliminated. The patients were overjoyed with the results.

## Case 3: Severe Chronic Allergies and Nasal Dripping Resolved by Chinese Herbal Formula

Wei Labs Practitioner, DC, CA

A 50-year-old male was suffering from chronic allergies since he moved to California over 7 years ago. He was constantly sneezing, tearing up, and later on developed headaches and dizziness. During the 7th year, his nasal membrane had become so damaged from the eroding mucus produced by the immune system that he was using an entire roll of toilet paper to wipe his nose throughout the day. The regular bath tissue was too hash for his nose because his nasal membrane was so fragile and the tissue could break his nasal membrane causing bleeding. His tearing up was always present. The patient tried everything available on the market even Bitter Formula at double the dosage without any results. The patient thought about moving out of California because he was suffering so terribly.

The patient was recommended to take Bitter Plus. The formula works to remove blood heat while also nurturing the blood Yin and lung Qi. After 9 days of using the formula, he felt that his head had become a little numb and then all the symptoms had gone.

In the next year's allergy season, he still had some allergic reactions with symptoms of rashes appearing on his chest. He then took three days' worth of Bitter Plus and the rash had cleared completely. During the following year's allergy season, he experienced some rashes on his lower legs but a couple of days of Bitter Plus helped cleared them again. The patient is very happy to have such a fast turnaround from his symptoms as well as accomplishing this through the use of an all-natural herbal formula.

# Case 4: Successful Resolution of IPF and Respiratory Tract Infection

Marianne Beck, DC, FL

An 80 y.o male patient came to Dr. Beck with Idiopathic Pulmonary Fibrosis (IPF), Congestive Heart Failure and Coronary Artery Disease. The patient experienced shortness of breath, persistent cough with post nasal and back dripping. His cardiologist reported that he has a crackling sound in certain areas of his lungs. For the pulmonary fibrosis condition, Dr. Beck prescribed a lung treatment from Wei Laboratories, including herbal formula Soup A, Soup B, and LC Balancer. Soup A nurtures the lung structure and assists in new tissue generation. Soup B helps dissolve lung scarring and fibrotic tissues. The LC Balancer enhances the microcirculation and clears up mucus and inflammation in the bronchial tubes.

The patient started the treatment on Apr 26, 2017. After 2 weeks of treatment, the patient reported that his oxygen saturation time was improved, and he was able to use less oxygen. His cardiologist verified that the crackling sound in certain areas of his lungs prior to treatment was gone (verified with a stethoscope). The patient reported that he felt stronger, but he still had a persistent cough with post nasal and back dripping.

Dr. Beck suggested that the patient's persistent cough, post nasal and back dripping indicated the patient had mycoplasma/mycobacteria infections in his respiratory tract. Dr. Mariane Beck added lung mycoplasma/mycobacteria infection removal treatment including ClearLung, Jade, Java, and Newbase from Wei Laboratories. ClearLung helps clear lung inflammation in the bronchi and air sacs caused by infections or irritants. Jade increases blood flow to the lungs and enhances its immunity. Java helps improve lymphatic circulation. NewBase removes deficiency heat in the kidneys.

After one month, the patient reported that His MD said there was an obvious improvement. The patient was on a 1mg/day Prednisone reduction program, his prednisone usage had reduced from 45mg daily to 20mg daily. The patient still had some coughing but with more phlegm production. The phlegm was green and yellow in color. At that time, the patient was going on a trip to MA for 3 months very soon. Dr. Beck advised the patient to continue the treatment of Soup A, Soup B, LC Balancer, ClearLung, Jade, Java, and NewBase.

The patient updated Dr. Beck one month later when he had finished the previous infection removal treatment for 2 weeks. During the treatment, there had been a noticeable improvement in breathing and cough consistency. The

patient's cough was not persistent and was getting better, but wetter with phlegm. Pulmonologist still heard sound in the lower lobe of lungs and outer peripheral edges. His oxygen saturation was 94% at rest and 95% with exertion. However, the patient started to have difficulty breathing air into lungs while in Massachusettes, which is 1200 ft above sea level (his home in Florida has an altitude of 6 ft. The patient was particularly concerned whether the symptom would get worse when he was at a higher altitude (due to a decrease in oxygen percentage), for he was going to a town at an altitude of 2100 ft two weeks later. Dr. Beck noticed that the patient had a history of throat fungal infection in 2016. She pointed out that, the symptom (difficulty breathing air into lungs) and the fact that the patient experienced the symptom after an increase in elevation, along with throat fungal infection history, all suggested that the patient had lung fungal infections. Dr. Beck added Wei Lab's CL-3 formula at 2 capsules, 3 times per day to address lung fungal infection. CL-3 helps clear bacteria in the lungs and respiratory tracts which have thicker cell walls and fungi type of microorganisms. Dr. Beck also added CV formula, which helps remove plaque from the artery and repair artery damage, to help improve his cardiovascular condition. The patient was also taking Soup A, Soup B, LC Balancer, Java, and Jade. His MD gave him antibiotic Bactrim to help avoid Pneumocystis Pneumonia.

The patient had fast improvement after taking CL-3. Within 2 days, he breathed a lot better even at a higher altitude! The patient did feel that Soup A, Soup B, LC Balancer, Jade, and Java also contributed to the improvement. The patient was very happy. On Aug 10, 2017, the patient reported that he saw more improvement. He used to be too weak to go to the Pulmonary Rehab without anybody going with him, at this time he could go all by himself. He used to be on oxygen 24/7, after treatment he would even forget to use his oxygen sometimes: there was once he went to get a hearing aid replacement and then pick up tickets for a show, only to find out that he didn't even remember to take his oxygen with him! Overall, it seemed to him that his breathing became 10 times better! His oxygen saturation was between 94%-95%. He still needed oxygen with exertion. His energy level was pretty well throughout most of the day, though he got fatigued in the afternoons, which he felt was related to cardiovascular issues. He is currently continuing the treatment for more improvement.