

CASE STUDY

History of Present Illness:

A.S. is a 42 year old white male who presents to your office in spring for headache, severe nasal congestion and shortness of breath. Over the past 3 years he has had a diminished sense of smell. He has been using multiple nasal sprays without significant improvement in his symptoms. The only medicine that has significantly improved his nasal symptoms is oral or injectable steroids. As a child, he had allergies and asthma. He presents because he is planning a trip to Italy in 6 months and would like his symptoms to be treated before his trip to Italy.

PMH: Allergic rhinitis, asthma.

PSH: Childhood tonsillectomy.

Social History: Occasional alcohol. No environmental tobacco.

Medication Allergy: Aspirin.

Current medications: Fluticasone 2 sprays intranasally daily, Pseudoephedrine 30 mg daily, Azelastine 1-2 sprays twice daily, Cetirizine one tab daily and Ipratropium Bromide 1-2 sprays daily

PHYSICIAN EXAMINATION:

General: Vitals are stable. Healthy appearing male in no acute distress.

Skin: No evidence of eczema.

EENT: Allergic shiners bilaterally. Conjunctivae are clear. Minimal cerumen bilaterally. Septal deviation with moderate to severe turbinate hypertrophy. Torus palatinus and was otherwise unremarkable.

Lungs: Clear to auscultation with fair excursion and a prolonged expiratory phase.

Heart: RRR.

Abdomen: Soft and non-tender.

Extremities: Normal appearing nevi. No peripheral edema.

What are your differential diagnoses and what additional information or tests would you like to order?

Allergy Testing: Skin vs. blood

Skin testing to inhalant allergens revealed reactivity in multiple categories tested.

Spirometry:

Spirometric evaluation was normal with partial reversibility postbronchodilatation.

Rhinoscscopy versus sinus CT scan?

Nasal congestion can be caused by anything that irritates or inflames the nasal tissues.

Infections

Allergies

Irritants

Tumor (less common)

Potential causes of nasal congestion include:

- Acute sinusitis (sinus infection)
- Alcohol
- Allergies
- Chronic sinusitis
- Churg-Strauss syndrome
- Common Cold
- Decongestant nasal spray overuse
- Deviated septum
- Dry air
- Enlarged adenoids
- Food, especially spicy dishes

Potential causes of nasal congestion include:

- Foreign body in the nose
- Granulomatosis with polyangiitis (Wegener's granulomatosis)
- Hormonal changes
- Influenza (flu)
- Medications, such as those used to treat high blood pressure, erectile dysfunction, depression, seizures and other conditions
- Nasal polyps
- Nonallergic rhinitis (chronic congestion or sneezing not related to allergies)
- Occupational asthma
- Pregnancy
- Respiratory syncytial virus (RSV)
- Sleep apnea
- Stress
- Thyroid disorders
- Tobacco smoke

Causes of anosmia:

- Infections – common cold, sinusitis
- Nasal polyps
- Nasal fractures
- Allergic rhinitis
- Anatomic deformity
- Aging
- Multiple conditions associated with brain and nerves.

Risk factors for Nasal Polyps

- Infections
- Allergies
- Asthma
- Aspirin sensitivity
- Allergic fungal sinusitis
- Cystic fibrosis
- Churg-Strauss syndrome

DIFFERENTIAL DIAGNOSES:

- Aspirin-exacerbated respiratory disease
- Allergic rhinitis
- Asthma
- Sinusitis
- Nasal polyposis
- Nonallergic rhinitis
- Adenoidal hypertrophy
- Sleep apnea
- Granulomatosis with polyangiitis
- Allergic bronchopulmonary aspergillosis

MANAGEMENT

- Allergen Immunotherapy – SCIT vs. SLIT
- Normal saline sinus rinses
- Nasal steroids
- Surgical intervention
- Leukotriene modifiers
- Consider NSAID desensitization