Nasal Obstruction

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Case History #1

• **HPI:** 35 year-old male presents with 3-year history of nasal congestion, sneezing, itchy/watery eyes, and clear rhinorrhea.

• Worse in spring and fall.

• No previous allergic work-up.

• Never tried any medications.

• **PE:** polyps present on nasal endoscopy.
Allergic Rhinitis

• Diagnostics
  – Pin prick, intradermal, RAST, ELISA
  – Empiric treatment
  – CT sinus in some cases
  – Spirometry
Allergic Rhinitis

- Treatment
  - Nasal saline irrigations
  - 2nd generation antihistamines (Zyrtec, Allegra)
  - Topical glucocorticoids (Flonase, Nasacort)
  - Mast Cell Stabilizers (Cromolyn, Nedocromil)
  - Immunotherapy
Case History #2

- **HPI:** 40 year-old patient presents with 2-year history of persistent clear anterior/posterior rhinorrhea.
- Worst in the morning. Alternates sides.
- Has been tried on several prolonged courses of nasal steroids without benefit.
- Previous negative allergy evaluation
- **PE:** pale nasal mucosa.
Vasomotor Rhinitis

• **Diagnosis of exclusion**
  – Rule out other causes
    • Pregnancy
    • Hypothyroidism
    • *Rhinitis Labs:* CBC, ESR, ANA, ENA, CRP, ANCA, ANGIO, TSH.

• Triggers
  – Humidity/temperature changes, oral contraceptives, antihypertensives, antipsychotics, cocaine, exercise.
Vasomotor Rhinitis

• Treatment
  – Find and eliminate triggers if possible
  – Hypertonic nasal saline sprays
  – Anticholinergic nasal sprays
    • Ipratropium bromide (*Atrovent*)
      – 0.03% and 0.06% spray
Case History #3

- **HPI:** 24 year-old patient presents with 6-month history of bilateral nasal congestion with clear rhinorrhea.
- Never had allergic work-up or been tried on nasal corticosteroid sprays.
- Self-medicates with *Afrin* nasal spray 2-3 times/day. Only thing that works!
Rhinitis Medicamentosa

- Treat like an addiction similar to smoking.
- Wean patients off slowly over the course of 4-6 weeks.
- Begin by first dealing with one side then the other.
- Replace decongestant spray with a topical corticosteroid spray.
- Aggressive nasal saline irrigation.
- +/- short term oral corticosteroids.
Case History #4

- **HPI:** 50 year-old male presents with obstructed nasal breathing for as long as he can remember.
- Left side always worse than right.
- Was told he broke his nose several years ago but “never had it fixed.”
- *Breathe-right* nasal strip helps significantly.
Nasal Anatomy

• Sites of obstruction
  – Septum
  – Inferior turbinate
  – External valve
  – Internal valve
Surgical Therapies- Septum

• Septoplasty
  – Remove deviated portion of cartilaginous or bony septum via intranasal incision.
  – Outpatient procedure.
Surgical Therapies - Inferior Turbinate

- Inferior turbinate reduction
  - Cautery
  - Somnoplasty
  - Microdebrideement

- Can be done in the office.
- Rarely the sole cause of nasal obstruction.
- Often done in conjunction with bony out fracture.
Surgical Therapies- ENV

• External nasal valve
  – Alar batten grafting
    • Done either by external or intranasal incision.
    • Use native septal cartilage in most cases.
Surgical Therapies (INV)

• Internal nasal valve
  – Spreader grafting
  – Butterfly grafting
  • Ear cartilage graft
Case History #5

- **HPI:** 15 year-old male presents with a 3-month history of recurrent daily epistaxis.
- Always on right side of nose.
- Accompanied by right facial pain/pressure.
- **PE:** unremarkable, no suspicious bleeding sources seen along the anterior nasal septum.
Juvenile Nasopharyngeal Angiofibroma

- Occurs exclusively in adolescent males aged 7-19 years.
- Presentation: nasal obstruction (80-90%), epistaxis (45-60%), HA/facial pain (25%).
- Benign tumor that originates posteriorly near sphenopalatine foramen.
- Diagnosis: clinical history + CT sinus
- Treatment: surgical excision +/- preoperative embolization.
Conclusions

• Clinical history is critical.
• Important to remember that vasomotor rhinitis is a diagnosis of exclusion.
• Fixed anatomic nasal obstruction can be relieved with surgery.
• Unilateral symptoms or unilateral findings on CT scan → high index of suspicion for neoplasm & consider ENT referral.