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CURRENT CONCEPTS ON COMPLEX ISSUES

RHINOGENIC HEADACHE — Michael Setzen, MD, Clinical Assistant Professor of Otolaryngology, New York University School of Medicine, New York City

Headaches: commonplace (70%-80% of population); $50 billion annual expenditure; responsible for 1% of annual patient visits; 30 million have migraines, 37 million have rhinosinusitis; "sinus headache" may be due to other conditions (*eg*, deviated septum, turbinate problems, concha bullosa); otolaryngologists often evaluate patients because of "sinus headache" complaints, headaches unresponsive to treatment, or nasal problems related to headache; majority of headaches migraine, although patients believe headaches sinus-related

Rhinologic causes: acute rhinosinusitis; anatomic variations (contact-type) cause headaches directly or in conjunction with sinusitis by blocking sinus ostia; variations include huge septal spur pressing against middle or inferior turbinate, concha bullosa, prominent ethmoid bullae, agger nasi cells, abnormally bent uncinate process; any of these can cause facial pain or headache; many studies have shown that medical and/or surgical intervention relieved symptoms

History: ask about congestion, drainage, facial pain, anosmia, fever, cough, ear fullness, precipitating factors; treatment by neurologist, temporomandibular joint (TMJ) specialist, or allergist? recommendations? effectiveness? *headache history* —location, duration, precipitating and relieving factors; visual aura? relation to stress

Diagnosis: nasal endoscopy, CT of sinuses; facial pain important factor in sinus disease, while headache minor factor; *International Society of Headache characterization* — purulent nasal drainage, abnormal x-ray findings, pain over one sinus simultaneously with headache; headache location important

Migraine headache: lasts 4 to 72 hr; unilateral, pulsating, moderate-to-severe intensity; may have associated symptoms of nausea, vomiting, and photophobia; may have nasal complaints (congestion, postnasal drip); pain caused by vasodilation of blood vessels in dura and cholingeric stimulation of nerve endings in nose; *triggers* — stress, fatigue, caffeine, alcohol, menses, altitude change

Examination: palpate sinuses (elicit tenderness); nasal endoscopy; if patient has pain at time of examination, resolution of pain after injection of vasoconstrictor in region of contact point provides useful information (*eg,* contact spur); routine examination not sufficient; must look at osteomeatal complex for sinus disease (*eg*, purulence, retroverted middle turbinate, septal spur, concha bullosa); inform patient that surgical correction of anatomic defect *may* resolve headaches; do not guarantee headache resolution

Treatment: aggressive treatment of infection or allergy; consider treating migraine; consult specialists; *mild migraine* —ibuprofen; *moderate-to-severe migraine* — triptans (safe in patient without cardiac disease); give one tablet, then another if no relief in 1 to 2 hr; key is to treat patient as soon as symptoms occur; if medical therapy fails and physician thinks contact points cause of problem, inform patient of risks, benefits, and alternatives, and perform septoplasty and/or correction of other anatomic abnormalities; endoscopic sinus surgery controversial

READINGS

Lainez MJ et al: Effects on productivity and quality of life of rizatriptan for acute migraine: a workplace study ***H****eadache* 45:883, 2005.

Ramadan HH: Nonsurgical versus endoscopic sinonasal surgery for rhinogenic headache *Am J Rhinol* 13:455, 1999.

Scarupa MD et al: Rhinitis and rhinologic headaches *Allergy Asthma Proc* 25:101, 2004.

QUESTIONS

The majority of headaches seen by otolaryngologists are actually migraine headaches.

(A) True (B) False

Pain resolution after injection of a vasoconstrictor ____ useful in establishing the cause of a headache.

(A) Is (B) Is not