Pediatrics – H&P #2

Chief complaint: "Ear tugging" x 1 day

History of Present Illness
A 2-year-old male with a past medical history of eczema presents to the pediatrics office with his mother for fever and ear tugging that started yesterday. The mother reports that the fever, measured orally, reached 103°F, and she has been trying to control it with Tylenol and Motrin, alternating since 5:45 am yesterday. She notes that the child has been pulling and tugging at both ears and complaining of bilateral ear discomfort since yesterday. The patient has a history of recurrent ear infections, with a total of six visits to the office for the same complaint over the past year, treated with various antibiotics such as amoxicillin, Augmentin, and Omnicef. The last episode of a similar complaint was 2 weeks ago. In addition to the fever and ear discomfort, the mother also reports that the patient has congestion and a cough. There are no reports of ear discharge, sore throat, difficulty swallowing, shortness of breath, nausea, vomiting, diarrhea, or abdominal pain. The mother denies recent travel or any sick contacts.

Past Medical History
-Eczema, controlled with hydrating cream, no medications.
-Coxsackie infection, 9/2023.
-UTD with vaccinations

Past Surgical History
-No past surgical history
-Denies blood transfusions and past injuries

Medications
-No medications or supplements

Allergies
-NKDA
-no environmental or food allergies

Family History
Father - alive and healthy
Mother - alive and healthy

Social History
Patient lives at home with parents. Follow up with a local pediatrician regularly.
No smokers at home and one dog.
Travel – Denies recent travel
Diet – Mother admits to following a well balanced diet.

Review of Systems
General – Mother admits fever x 1 day. Denies headache, weakness or recent weight loss.
Skin, hair, nails - Denies changes in texture, excessive dryness or sweating, discolorations, pigmentations, moles/rashes, pruritus, or changes in hair distribution.
Ears – Admits bilateral ear pain, muffled sound, sensation of fullness. Denies deafness, discharge.

Nose/sinuses – Denies discharge, obstruction or epistaxis.

Mouth/throat – Denies sore throat, bleeding gums, mouth ulcers, voice changes.

Neck - Denies localized swelling/lumps or stiffness/decreased range of motion.

Pulmonary System – Admits to a cough but denies dyspnea. wheezing, dyspnea on exertion, hemoptysis, cyanosis, orthopnea.

Cardiovascular System – Denies chest pain, HTN, irregular heartbeat, edema/swelling of ankles or feet, syncope, or known heart murmur.

Gastrointestinal System – Denies nausea, vomiting, diarrhea, abdominal pain, or jaundice

Genitourinary System – Denies urinary frequency, dysuria

Physical exam
General: Young male appears his stated age, height and weight, awake, neatly groomed, alert and oriented x 4, patient is in no acute distress, has good color, very cooperative during physical exam and can ambulate without assistance.

Vital signs:
BP: 100/60 mm Hg
R: 20 breaths/min, unlabored
P: 100 beats/min, regular
T: 101.0 degrees F (taken by ear)
Weight: 29 lbs

Hair: Average quantity and distribution. No signs of lice or dandruff.

Skin: Warm and moist, good turgor. Nonicteric, no lesions, scars, or tattoos noted.

Nails: No clubbing, cyanosis, or lesions. Capillary refill < 2 seconds in upper and lower extremities.

Eyes: Mild conjunctival injection OU. Symmetrical OU. Pupils are equal, round, and reactive to light. No strabismus, exophthalmos or ptosis. Red reflex present.

Ears: External ears with no masses, lesions, or discharge. No tenderness noted with pulling pinna. Tenderness present with insertion of speculum noticed because of wincing. No swelling or erythema noted in the ear canal B/L. Excessive dark brown cerumen noted B/L. B/L TMs bulging, erythematous, with absent light reflex.

Nose: No signs of masses, lesions, deformities, or trauma. No signs of nasal congestion.

Mouth: Lips pink and moist with no cyanosis or lesions. Buccal mucosa, palate, and gingivae are pink and well hydrated. No masses or lesions. Normal dentition, with no signs of dental caries.

Pharynx: oropharyngeal clear.

Neck: No lymphadenopathy present.

Chest: Respirations unlabored / Chest expansion and diaphragmatic excursion symmetrical. No paradoxical respirations or use of accessory muscles noted.

Lungs: Clear to auscultation bilaterally. No adventitious sounds with no evidence of drooling or stridor noted.

Heart: Regular rate and rhythm (RRR). S1 and S2 are distinct with no murmurs, S3 or S4. No splitting of S2 or friction rubs appreciated.

Differential Diagnosis

Otitis Media with Effusion (OME): Also known as serous otitis media, OME is defined as a middle ear effusion without signs of acute infection, often occurring after or before an acute otitis media episode but can also result from Eustachian tube dysfunction without prior acute otitis media. Some cases develop into chronic otitis media with effusion that persists for up to three months. The predominant symptom is mild hearing loss, but patients may also experience a feeling of fullness in the ear, tinnitus, or balance problems. Clinical findings include impaired mobility of the tympanic membrane, commonly amber-colored middle ear fluid (though it may be colorless), and a tympanic membrane in a neutral or retracted position, differentiating it from acute otitis media, which presents with a full and bulging tympanic membrane.

Acute Otitis Media (AOM): AOM is defined by fluid in the middle ear accompanied by acute signs of illness and symptoms of middle ear inflammation. These signs and symptoms include bulging of the tympanic membrane, ear pain, and/or fever. Otitis media with effusion is usually asymptomatic, whereas AOM is symptomatic. Children often present with ear pain, ear rubbing, hearing loss, and ear drainage. Cerumen must be removed if it obstructs a clear view of the tympanic membrane. Classic examination findings include a fluid-filled middle ear and a tympanic membrane that is bulging, opaque, yellow, or white, with decreased or absent mobility. A red or hemorrhagic tympanic membrane may indicate inflammation but is nonspecific, as redness can be caused by irritation, crying, or high fever.

Otitis Externa (OE): Otitis externa is inflammation of the external auditory canal and can be caused by infectious, allergic, or dermatologic diseases. The most common symptoms are ear pain, discharge, and hearing loss. On physical examination, the external ear should be examined for trauma. Tenderness with tragal pressure or when the auricle is manipulated is typical. The ear canal usually appears edematous and erythematous. The tympanic membrane may be erythematous and only partially visible due to canal edema.

Myringosclerosis: Myringosclerosis involves structural changes to the tympanic membrane, resulting in whitish plaques of calcium and phosphate crystals, causing the membrane to harden and become rigid. This condition leads to the development of white chalky lesions or spots on the membrane. The most common symptom is hearing loss. Myringosclerosis, also known as

tympanosclerosis, can occur after an infection, perforation, or surgery and is often a complication of tympanostomy tube placement.

Redness of the Tympanic Membrane Due to Other Factors: Redness of the tympanic membrane may be caused by vascular engorgement due to crying, high fever, upper respiratory infection with congestion and inflammation of the mucosa lining the entire respiratory tract, trauma, or cerumen removal.

Assessment

A 2-year-old male with a history of recurrent ear infections presents with a high fever (103°F), bilateral ear tugging, congestion, and a cough, which began yesterday. Given his history, current symptoms, and physical exam findings the patient may be experiencing another acute otitis media episode, potentially complicated by a concurrent upper respiratory infection.

Plan

CBC
Motrin 1 ½ tsp administered in office
Omnicef (Cefdinir) 125 mg/5 mL , 3 ml BID x 10 days
ENT referral for recurrent acute otitis media