Chief complaint: “Left ear drainage x 1 day ”
HPI
An 8 y/o male with PMHx of chronic ear infection, bilateral middle ear effusion, hearing loss and a bilateral tympanostomy tubes presents in peds clinic accompanied by mother sent by Audiology Department due to Left ear pain and light yellowish discharges x 1 day. Pt admits mild left ear pain and discharge and states it is recurrent problem. Admits use of NSAIDs for the symptoms which provided moderate relief. Associated symptoms include coughing, ear discharge, hearing loss and rhinorrhea. Pt denies chills, headaches, vision changes, abdominal pain, nausea, vomiting, diarrhea, neck pain, rash, sore throat.

Past Medical History:
Otitis media with effusion (07/31/2024)
History of 2019 novel coronavirus disease (COVID-19) 03/23/2021
Expressive language delay. 03/28/2018
Neutropenia (HCC). 03/02/2017
Allergic rhinitis
Acanthosis nigricans

Past Surgical History:
Tympanostomy general anesthesia (Bilateral) 09/25/2024
Tonsilectomy, adenoidectomy, bilateral myringotomy and tubes (09/25/2024)

Immunization History:
UTD on vaccine with
COVID VACCINE (3 - Pediatric 2024-25 season) 09/01/2024
DTAP/TDAP/TD VACCINE (6 - Tdap) 02/11/2027
MENINGOCOCCAL CONJUGATE VALENT 4 (MCV4) VACCINE (1 - 2-dose series) 02/11/2027
HUMAN PAPILLOMA VIRUS (HPV) VACCINE (1 - Male 2-dose series) 02/11/2027
ZOSTER (SHINGRIX) VACCINE (1 of 2) 02/11/2066

Medications:
acetaminophen (TYLENOL) 160 mg/5 mL liquid
fluticasone propionate (FLONASE) 50 mcg/act nasal spray
ibuprofen (MOTRIN) 100 mg/5mL suspension
sodium chloride (OCEAN NASAL SPRAY) 0.65 % nasal spray
Allergies:
No known drug allergies
No known food allergies

Family History:
-Mother is alive, Age 33, hypertension,
-Father is alive, Age 42, Hyperlipidemia,
Paternal grandmother: diabetes mellitus

Social History:
Living situation – Currently lives with parents
Travel – No recent travel
Diet – Home cooked meals, school lunch or occasional fast foods.
Exercise – No exercises
Sleep – admits disturbed sleep in past week
Occupation – middle school,

Social Determinant of Health
As of Jul 2, 2024: Low Risk for Financial Insecurity, Education Need, Childcare Need, Housing Instability, Poor Housing Quality, Legal Need, Food Insecurity, Employment Need.

Review of Systems (ROS)
General: **Admits mild fever.** Denies chills, weakness weight changes, night sweats, body aches,
- Skin: denies rash, sores, lumps, itching, color changes, hair, nails
- Head: denies headache, trauma, nausea, vomiting, dizziness
- Eyes: denies pain, redness, tearing, vision loss, discharge, double/blurred vision,
- Ears: **Admits left ear discharge, ear pain, hearing loss and otorrhea.** Denies, tinnitus, vertigo,
- Mouth/Throat: Denies hoarseness, sore throat, voice change and sore throat bleeding gums, dentures, cavities,, dry mouth, difficult/painful
- Nose/Sinuses: **admits stuffiness, rhinorrhea, sneezing.** Denies itching, epistaxis
- Neck: denies lumps/masses, goiter, pain, stiffness, swelling
- Respiratory: **Admits cough.** Denies shortness of breath wheezing, hemoptysis, pleurisy, snoring

Cardiac: Denies palpitations, chest pain, DOE, orthopnea, paroxysmal nocturnal dyspnea, syncope, lower extremity edema
- Gl: Denies nausea, vomiting, diarrhea, abdominal discomfort, and decreased appetite bloating, dysphagia, regurgitation, indigestion, bowel movement frequency/color/size/caliber, changes in bowel habits, constipation, bleeding (hemorrhoids, melena, hematemesis, hematochezia)

Musculoskeletal: muscle or joint pain, stiffness, arthritis, gout, weakness, swelling, redness, instability
- Neurological: denies seizures, numbness, tingling, paralysis, paresthesia, fainting, blackouts, burning, tremors
- Hematological: denies anemia, easy bruising/bleeding, petechiae, purpura, ecchymosis, transfusions
- Endocrine: denies heat/cold intolerance, sweating/thirst/hunger
- Psychiatric: denies nervousness, mood, anxiety, depression or suicidal ideation.

Physical Exam

Vital Sign
BP 105/74 (BP Location: Right arm)
Pulse 91
Temp 97.5 °F (36.4 °C) (Oral)

Resp 22, unlabored
Wt 46.4 kg (102 lb 6 oz)
Height 4’ 10”
99% percentile Z = 2.24
BMI: 21.40
SpO2 98%

Constitutional:
General: He is active. He is not in acute distress. Dressed appropriately for the weather, appear stated age.
HENT:
Head: Normocephalic and atraumatic.
Right Ear:. Mild cerumen in both ears
Ears:
Comments: **+right TM normal with tympanostomy tube in place**
+left TM erythematous with drainage from tympanostomy tube
Nose: **Nasal discharge** present.
Mouth: Mucous membranes are moist with uvula midline. No signs of lesions. Good dentition.
Pharynx**: tonsils removed, Uvula midline**
Eyes:
No foreign body or discharge. Extraocular movements intact, No conjunctivae injection
Pupils are equal, round, and reactive to light. PERRLA
Cardiovascular:
Rate and Rhythm: Normal rate and regular rhythm.
Heart sounds: S1 normal and S2 appreciated. No murmur heard. No gallop
Pulmonary:
Effort: Pulmonary effort is normal.
Breath sounds: bilateral breath sounds and air entry. No wheezing, rhonchi or rales.
Abdominal: Bowel sounds present. Soft, non-distended, non-tender to palpation, no rebound tenderness, no guarding
Musculoskeletal:
Cervical back: Normal range of motion and neck supple.
Lymphadenopathy:
Head: No occipital adenopathy.
Cervical: No cervical adenopathy.
Skin:
Coloration: Skin is not pale. Capillary refill takes less than 2 seconds.
Neurological:
Mental Status: He is alert and oriented x 3. Mental status is at baseline.
Cranial Nerves: No cranial nerve deficit.

Differential Diagnoses

1.Acute Otitis Media with Tympanostomy Tube (AOMT)

He has history of chronic ear infections and tympanostomy tubes, with current symptoms of left ear pain, erythematous tympanic membrane, and drainage from the tube. These findings are consistent with AOMT, where tympanostomy tubes allow for drainage of infected material.

2.Chronic Suppurative Otitis Media (CSOM)
The recurrent nature of the symptoms, hearing loss, and drainage raise concern for CSOM, especially given the patient's history of bilateral middle ear effusion and tympanostomy tubes.

3. Otitis Externa
The ear discharge and mild pain could also be attributed to external ear canal inflammation, especially if moisture or infection in the external ear canal led to superimposed otitis externa.

4. Upper Respiratory Tract Infection (URI) with Eustachian Tube Dysfunction
The associated symptoms of rhinorrhea and cough could point toward a URI, which may exacerbate underlying middle ear conditions through eustachian tube dysfunction.

Assessment
An 8-year-old male with a history of chronic otitis media, bilateral tympanostomy tubes, and hearing loss, presenting with left ear pain and drainage for 1 day. Physical exam reveals an erythematous left tympanic membrane with drainage through the tympanostomy tube, suggesting Acute Otitis Media with Tympanostomy Tube (AOMT). The associated rhinorrhea and cough may indicate an underlying URI contributing to the ear infection. The patient has been managing mild symptoms with NSAIDs, which provided moderate relief. There are no systemic signs of severe infection, and vitals are stable.

Plan
Diagnostics
Obtain a culture of the left ear discharge to identify potential pathogens and guide antibiotic therapy.
Audiology follow-up to monitor for progression of hearing loss.
Treatment
Prescribed topical otic antibiotics with corticosteroids (e.g., ciprofloxacin-dexamethasone drops) for localized treatment of AOMT.
Continued NSAIDs (e.g., ibuprofen) for pain relief as needed.
Reinforced proper administration of ear drops.

Supportive Care
Recommended saline nasal spray and fluticasone nasal spray for symptomatic relief of nasal congestion and rhinorrhea.
Education
Advised parents on signs of worsening infection (., fever, increasing pain, persistent drainage) to return to the clinic
Counsel on keeping the ears dry and avoiding water entry into the ear canal.
Follow-Up
Scheduled a re-evaluation in 7–10 days to ensure resolution of symptoms and assess for persistent drainage or hearing changes.

Referred to ENT if symptoms persist or there is concern for chronic suppurative otitis media.