10/5/25 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Sam & Sarah B(@) Case Discussants: Anmolpreet (@) and Sawsan(@)

https://clinicalproblemsolving.com/present-a-case/

Scribing (Masah)

CC: 9 month old previously healthy male with 2 months of **recurrent intermittent fevers**

HPI:

Presented to outside hospital(OSH) for fever and was found to have otitis media. He was admitted to OSH for observation due to one episode of SVT. He was treated with ceftriaxone given **2 prior episodes of AOM,** tx with amoxicillin & amoxicillin / Clavulanic acid. OSH work up: imaging without clear source but hydrocephalus requiring EVD placement. Now relapsing fevers for 2 months. Transferred to pediatric ICU.

OB:

Growth & development appropriate for age. Full vaccination. Born via C-s 40 wks, no complications, no meds during pregnancy.

PMH:

2 episodes of AOM

Meds:

Amoxicillin / Clavulanate

Metronidazole (at 8 mo for pneumatosis)

Fam Hx:

No autoimmune conditions/congenital abnormalities.

Social Hx:

Lives with parents, brother (healthy), non-family member roommate, 2 dogs. No travel Hx.

Allergies: NKDA

Vitals: T: 38.1C/100.6F **HR:** 146 (nl) **BP:** 97/71 (nl) **RR:** 40 (nl) **Sat:** 100%

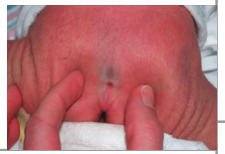
Weight: 8.8 kg (~40 percentile)

Exam: Gen: Lethargic

HEENT, CV, Pulm, Abd, Neuro: wnl

Extremities/skin: finding that was present since birth

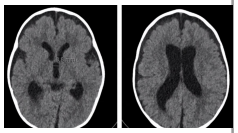
Sacral dimple with surrounding hyperpigmentation



Notable Labs & Imaging:

Hematology: WBC: 32k (ANC 26k) Hgb: 8.5 Plt : 729

Hct: 27.9 MCV: 67.9 RDW: 16.6 (high)



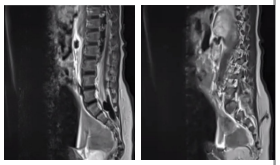
Chemistry: Na, K, Cl: wnl LFT: wnl

BCx: NGTD **Urinalysis:** wnl

CSF cx: Propionibacterium with negative meningitis/encephalitis PCR panel

CSF: WBC 178, 72.4% segmented, 2.3% lymphs, 25.3% monocyte

Glucose 35 protein 100 RBC 94



CXR: lower lung volumes (vs. bl 2 mo ago)

Echo: normal, no vegetations

NCT Head: Ventriculomegaly

MRI brain : Leptomeningitis, ventriculitis

MRI spine w/contrast: sacral dermal sinus tract with intraspinal extension with a peripherally enhancing collection in the distal thecal sac extending from L5-S4 & meningeal inflammation

EVD was replaced, started on 10-day course of ceftriaxone, further CSF cultures were negative. Autoimmune panel, AFB negative

Dx: Recurrent leptomeningitis caused by a sacral dermal sinus tract

Neurosx consulted to fix defect → improvement

Problem Representation: 9 month yo w/ PMH of OM p/w recurring fevers and hydrocephalus. Revealed to have hydrocephalus, VP shunt was placed w/ CSF studies showing neutrophilic pleocytosis. MRI imaging showed brain leptomeningeal enhancement and sacral dermal sinus tract with meningeal lumbosacral inflammation.

Teaching Points (Vale)

- **Pediatric patients:** Search for risk factors related to birth, immune status, developmental milestones, vaccination status, exposures or contacts.
- Need to determine if it is truly fever and time between episodes.
- Onset of symptoms could clue to stop of protection of maternal antibodies.
- **Recurring fevers in babies:** infections, chronically inflammatory diseases and recurrent fever syndromes.
- **Hydrocephalus:** Communicating (ex. A mass obstructing) vs non-communicating (ex. Meningeal dz).
- **Brain infection** -> rule out contiguous spread of dz (ex. From sinuses or ears) vs hematogenous spread.
- Growth curves and developmental milestones are clues to the chronicity of disease.
- Recurrent otitis media can suggest humoral immune deficiencies.
- **Recurring meningitis:** Immunodeficiency or CNS abnormalities, in both look for congenital vs acquired.