**NOTE 6**

**PATIENT 1005**

**DATE: 4/3/20**

**Note Narrative**  
DOB: 2/18/20   
  
**INTERVAL HISTORY**  
Patient has been stable without new fevers.  The soft tissue mass near ear has seemed smaller.  
**CURRENT INFECTIOUS DISEASES MEDICATIONS DOSED PER KG**  
oxacillin 52mg IV Q8h (50 mg/kg/dose; CNS dosing) [3/13 -  
fluconazole 3.8mg IV 2x/wk (3 mg/kg/dose) [3/20 -  
  
Prior:  
ampicillin/gent 2/18-2/20  
vanc 3/11-3/22  
piperacillin-tazobactam 3/19-3/25

**IMAGING**  
03/20  US Neck:  
FINDINGS:  
Again seen is a subcutaneous avascular fluid collection containing  
echogenic internal debris superficial and slightly superior to  
the right submandibular gland measuring 14 x 10 x 11 mm, not  
substantially changed from 3/20/2020 when it measured 13 x 9  
x 11 mm. Previously noted more inferomedial fluid collection  
is no longer seen. Remnant ill-defined area of hypoechogenicity  
deep to this prior fluid collection with associated mild hyperemia  
measures 11 x 7 x 7 mm. No new fluid collections. Diffuse soft  
tissue edema overlies the right cheek/submandibular region.  
  
IMPRESSION:  
1. Similar size of superolateral right submandibular/neck abscess.  
  
2. Interval resolution of more inferomedial fluid collection  
with a remnant ill-defined area of hypoechogenicity, which may  
represent inflammatory changes.  
3. Diffuse soft tissue edema overlying this region is likely  
related to cellulitis.  
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03/27  US Neck:  
Again seen is a subcutaneous avascular fluid collection containing  
echogenic internal debris superficial and slightly superior to  
the right submandibular gland measuring 13 x 6 x 11 mm, minimally  
decreased in size compared to 3/20/2020 when it measured 14 x  
10 x 11 mm. Previously noted residual inferomedial ill-defined  
hypoechoic region with associated mild hyperemia measures 11  
x 6 x 11 mm, previously 11 x 7 x 7 mm., Unchanged when accounting  
for slight differences in measurement technique No new fluid  
collections. Diffuse soft tissue edema overlies the right cheek/submandibular  
region.  
  
IMPRESSION:  
1. Minimally decreased superolateral right submandibular/neck  
abscess.  
2. Residual ill-defined hypoechoic region inferior medially in  
the location of prior fluid collection/abscess, similar to prior  
examination when accounting for differences in technique, likely  
reflecting residual inflammatory changes.  
3. Diffuse soft tissue edema compatible with cellulitis.  
  
03/28 US Neck:  
FINDINGS:  
In the area of concern in the superficial soft tissues of the  
right neck/anterior to the right ear is a predominantly anechoic  
structure with internal debris and posterior acoustic enhancement,  
measuring 1.5 cm in maximum dimension, compatible with a walled  
off fluid collection. Its size is similar compared to the most  
recent prior sonogram. However, the previously oval-shaped collection  
now demonstrates a focal outpouching directed toward the dermis  
(see video clip), which is new. There is no second fluid collection.  
The immediately adjacent soft tissues are hypoechoic, associated  
with increased vascularity deep to this area, as before, all  
of which are suggestive of inflammation.  
  
IMPRESSION:  
Solitary fluid collection/abscess in the area of concern in the  
right neck, which is similar in size compared to the sonogram  
dated 3/23/2020, however has somewhat changed in shape, i.e.  
with a focal outpouching which extends towards to but those not  
reach the skin, presumably representing the reported new area  
of concern in the right preauricular skin.  
  
03/28  IVC and Tributaries US:  
A central venous catheter is seen in the transhepatic IVC with  
the tip barely extending into the lower right atrium (for example  
image 4/8, and the clip), which is unchanged in position compared  
to the most recent prior abdominal radiograph. The transhepatic  
IVC is patent. There is no echogenic material attached to the  
imaged portion of the distal terminus of the catheter including  
the tip to suggest a thrombus.  
  
Partially imaged is a partially distended gallbladder containing  
sludge in its lumen. The imaged portion of the gallbladder has  
a normal wall thickness without pericholecystic fluid.  
  
04/02/20  US Neck Soft Tissue:  
NDINGS: In an area described by our sonographer as anterior  
to the right ear lobe, is an ill defined, irregularly shaped,  
heterogeneous focus with the following approximate dimensions:  
1.6 x 1.2 x 1.1 cm (dimensions on 3/11/20 = 1.4 x 1.5 x 1.9 cm,  
primarily complex fluid). Some of this area is anechoic, extending  
to the level of the skin surface, representing fluid, but adjacent  
areas are more echogenic and relatively hyperemic, implying the  
presence of inflamed, vascularized soft tissues. There is no  
definitive associated cystic mass or calcification.  
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IMPRESSION: Ill-defined fluid collection/inflamed area, immediately  
deep to the skin surface, with the fluid component considerably  
smaller as compared to the original sonogram from 3/11/20, but  
with a small remnant of fluid remaining. There are some adjacent,  
prominent, non-liquified lymph nodes. The relationship of this  
collection to the parotid gland is indeterminate, given the requirement  
of remote interpretation. The possibility that this represents  
infection of a congenital branchial cleft remnant should at least  
be considered.  
**MEDICAL DECISION MAKING   
   
Assessment:**  
Patient is a now **44** day old premature infant (born 24+2 wks gestation; PMA **30+4**) with PDA s/p surgical ligation and BPD on mechanical ventilation who developed a right-sided neck abscess/lymphadenitis and bacteremia due to MSSA (grew in blood and drainage cultures).  He has had 2 fine needle aspirations by ORL with return of purulent fluid on 3/13 and 3/16.  He has remained on oxacillin since his last aspiration, which would have tentatively ended on 3/30.  Around this time though, Patient was noted to have new soft tissue swelling on right cheek/preauricular area slightly below the ear (and superior to his prior collection).  Interval US imaging has demonstrated persistent right sided fluid collection/abscess, which may be communicating with this new area of concern - although 4/3 US is suggestive of decreasing size.  Patient has otherwise been doing well clinically without fevers or obvious cellulitis/drainage of the area.  Repeat blood cultures have also remained negative to date.  
  
We recommend continuing with oxacillin and discussing with ORL whether this new collection could be aspirated to send for culture.  If there is demonstration of persistent MSSA in the fluid, this would be helpful to determine if extension of antibiotics is warranted.  If the area seems to be sterilized, it would be worth investigating whether there is an anatomical reason why he has this potentially communicating collection, such as a branchial cleft cyst.  We would suggest cross-sectional imaging, although ultimately would defer to ORL/Radiology on which modality is best.  
  
New eosinophilia, will trend with repeat labs  
**Recommendations:**  
1.  Continue oxacillin as dosed  
  
2.  Would discuss possible aspiration of new lesion with ORL.  If sampling is feasible, would send for bacterial fluid culture and Gram stain  
  
3.  Would discuss utility of additional imaging of head/neck to assess for branchial cleft cyst with ORL/Radiology  
  
We have discussed these recommendations with NICU.  
Please page the ID Fellow on call with any questions.  
   
**Fellow:**Darrel Song, MD  
Pager: 2807  
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**Attending Addendum:**   I have reviewed the patient's history and diagnostic studies, performed an exam, and directly supervised rounds with our infectious diseases consult team.  This note, which reflects my edits, indicates our joint findings, assessment, and recommendations for this patient.  
  
John Tung, DO  
p 4966

**LABS**  
(04/02/20)  
WBC 4.8  
Hgb 12.5  
HCT 34.8  
Plt 112  
Diff: 22%N 42%L 22%M 10.8%E (AEC 520)  
  
BUN 13, Cr 0.3  
T-bili 2.6  
Last ALT 10, AST 34 (3/26/20)  
  
Last CRP 0.6 (3/26/20)  
  
03/14/20  
CSF: TNC 220, RBC 82k, 61% polys, 3% bands, 15% lymphs, 11% monos, 3% eos, 1% atypicals, 2% metas, 1% myelos, 1% macrophages  
CSF total protein 472, Glucose 59  
  
**MICROBIOLOGY**  
03/11/20  Blood cx: MSSA, Staph epidermidis

  Staph aureus coag+ Staph epidermidis

Clindamycin ≤0.25 S

Erythromycin ≤0.25 S ≥8 R

Gentamicin ≤0.5 S ≥16 R

Levofloxacin ≤0.12 S ≤0.12 S

Oxacillin ≤0.25 S ≥4 R

Rifampin     ≤0.5 S

Trim/Sulfa ≤0.5 S

Vancomycin     1 S

03/12/20  Blood cx: Staph epidermidis

  Staph epidermidis

Clindamycin ≤0.25 S

Erythromycin ≥8 R

Gentamicin 8 I

Levofloxacin 4 R

Oxacillin ≥4 R

Rifampin ≤0.5 S

Vancomycin 2 S

03/13/20  Blood cx: Staph epidermidis

  Staph epidermidis

Clindamycin   R

Erythromycin ≥8 R

Gentamicin ≥16 R

Levofloxacin 0.25 S

Oxacillin ≥4 R

Rifampin ≤0.5 S

Vancomycin 2 S

03/13/20  Blood cx: No growth  
03/14/20  Blood cx: Staph epidermidis

  Staph epidermidis

Clindamycin   R

Erythromycin ≥8 R

Gentamicin ≥16 R

Levofloxacin ≤0.12 S

Oxacillin ≥4 R

Rifampin ≤0.5 S

Vancomycin 2 S

03/15/20  Blood cx: No growth  
03/17/20  Blood cx: Staph epidermidis

  Staph epidermidis

Clindamycin ≥8 R

Erythromycin ≥8 R

Gentamicin ≥16 R

Levofloxacin 4 R

Oxacillin ≥4 R

Rifampin ≤0.5 S

Vancomycin 2 S

03/18/20  Blood cx: No growth  
03/19/20  Blood cx: No growth  
03/20/20  Blood cx: No growth  
03/27/20  Blood cx: No growth  
  
03/13/20  Swab cx (neck): MSSA

  Staph aureus coag+

Clindamycin ≤0.25 S

Erythromycin ≤0.25 S

Gentamicin ≤0.5 S

Levofloxacin ≤0.25 S

Oxacillin ≤0.25 S

Tetracycline ≤1 S

Trim/Sulfa ≤0.5 S

03/13/20  Abscess cx: MSSA  
03/13/20  Anaerobic abscess cx: no growth  
  
03/16/20  Abscess (right medial neck): MSSA  
03/16/20  Abscess (right lateral neck): MSSA  
  
03/14/20  CSF cx: no growth  
03/14/20  Meningitis/Encephalitis Panel: Negative  
  
03/28/20  CMV DNA PCR: Pending  
03/29/20  Rapid COVID negative