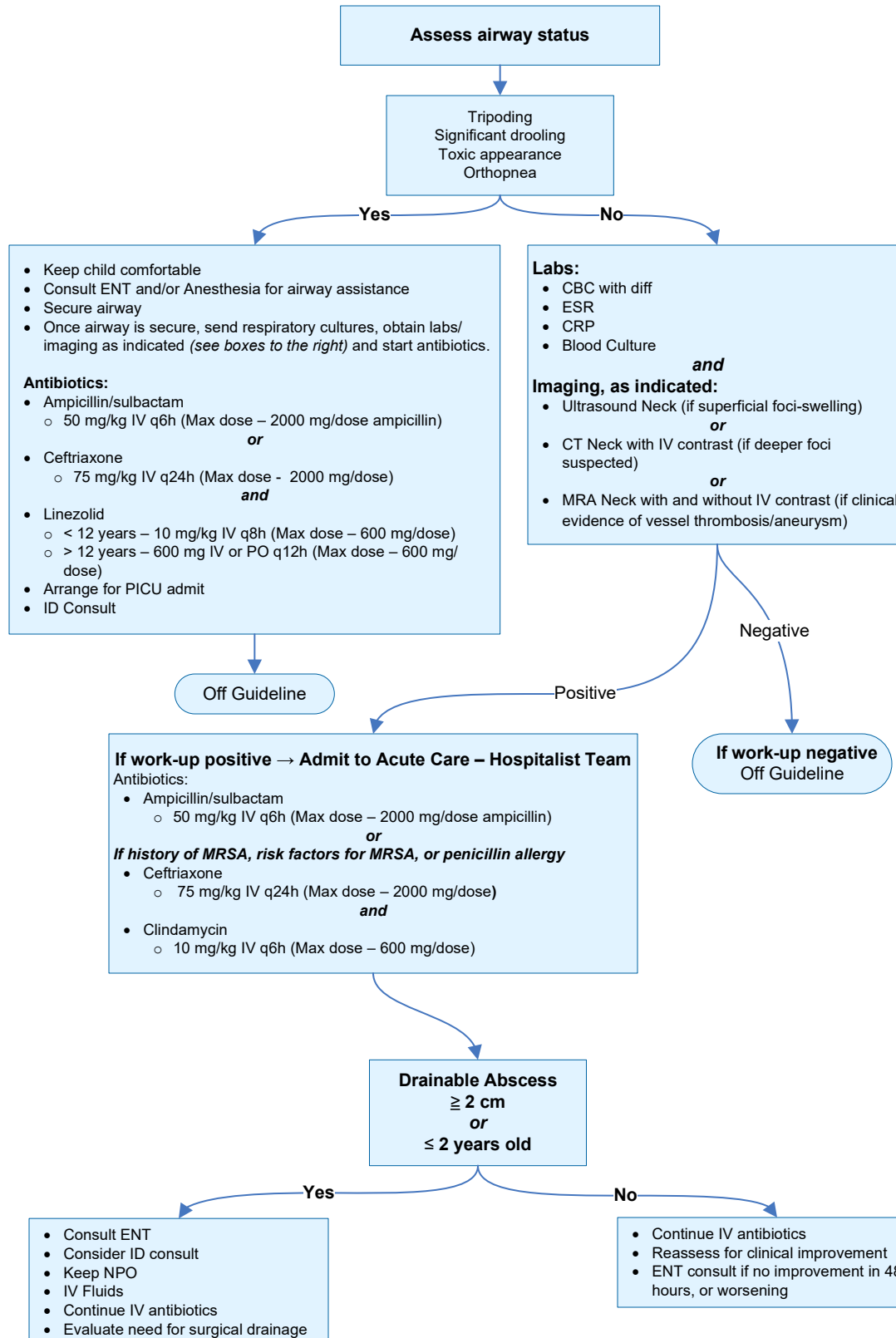


Deep Neck Infections – ED/Inpatient Care Guideline



Inclusion Criteria: Presence of fever, decreased neck movement, dysphagia, inability to tolerate secretions, change in voice, stertor, stridor, neck pain or trismus

Exclusion Criteria: Immune compromised status, known congenital malformation, trauma, recent neck surgery, hemodynamic instability, impending respiratory failure, neonatal (< 3months)



Recommendations/Considerations

Retropharyngeal Abscess

- Ages: 2 – 4 years
- Risk factors: recent URI, oropharyngeal trauma

Peritonsillar Abscess

- Peaks in adolescence (average age: 13.6)

Parapharyngeal Space Infection

(Lateral pharyngeal space infection)

- Most often arises via contiguous spread of infection from a peritonsillar or retropharyngeal abscess
- Most frequent age: 2 – 4 years

Common Pathogens:

- Group A Streptococcus
- Staphylococcus aureus (Including MRSA)
- Haemophilus species
- Bacteroides
- Prevotella
- Fusobacterium
- Veillonella
- Peptostreptococcus
- Propionibacterium
- Infections are usually polymicrobial

Complications:

- Airway obstruction
- Aspiration pneumonia
- Carotid artery pseudoaneurysm or rupture resulting in sepsis or hemorrhage
- Internal jugular vein thrombosis, septic thrombophlebitis of internal jugular vein (Lemierre's Syndrome)
- Mediastinitis

Patient Education

- Cerner Discharge Education – Peritonsillar Abscess

Discharge Criteria

- Discharge plan approved by ID/ENT, if consulted
- Afebrile
- Marked reduction in neck swelling and improved range of motion
- No respiratory difficulty
- Tolerating diet
- Antibiotic course prescribed
- Post-discharge follow-up appointment scheduled

Deep Neck Infections – ED/Inpatient Care Guideline *References*

- Adil, E., Tarshish, Y., Roberson, D., Jang, J., Licameli, G., & Kenna, M. (2015). The public health impact of pediatric deep neck space infections. *Otolaryngology-Head and Neck Surgery: Official Journal of American Academy of Otolaryngology-Head and Neck Surgery*, 153(6), 1036-1041. <https://doi.org/10.1177/0194599815606412> (Level III)
- Balfour-Lynn, I. M., & Wright, M. (2019). Acute Infections That Produce Upper Airway Obstruction. In R. W. Wilmott, A. Li, P. Sly, A. Bush, R. Deterding, F. Ratjen, & H. J. Zar, *Kendig's Disorders of the Respiratory Tract in Children* (Ninth ed., pp. 406-419.e3). Philadelphia: Elsevier. <https://doi.org/10.1016/C2015-0-01292>
- Bory C, Bory O, Guelfucci B, Nicollas R, & Moreddu E. (2023). Deep cervical abscesses in children: efficacy of the cefotaxime-rifampicin combination. *European Journal of Pediatrics*, 182(5), 2315–2324. <https://doi.org/10.1007/s00431-023-04917-1> (Level III)
- Demongeot, N., Akkari, M., Blanchet, C., Godreuil, S., Prodhomme, O., Leboucq, N., Mondain, M., & Jeziorski, E. (2022). Pediatric deep neck infections: Clinical description and analysis of therapeutic management. *Archives de Pédiatrie*, 29(2), 128–132. <https://doi.org/10.1016/j.arcped.2021.11.011> (Level III)
- Hankey, P. B., Tracy, M., & Arganbright, J. M. (2023). Emerging findings for the assessment and treatment of pediatric deep neck abscesses. *Current Opinion in Otolaryngology & Head and Neck Surgery*, 31(6), 407–411. <https://doi.org/10.1097/MOO.0000000000000937> (Level V)
- Jain, A., Singh, I., Meher, R., Raj, A., Rajpurohit, P., & Prasad, P. (2018). Deep neck space abscesses in children below 5 years of age and their complications. *International Journal of Pediatric Otorhinolaryngology*, 109, 40–43. <https://doi.org/10.1016/j.ijporl.2018.03.022> (Level III)
- Lawrence, R., & Bateman, N. (2017). Controversies in the management of deep neck space infection in children: an evidence-based review. *Clinical Otolaryngology: Official Journal of ENT-UK; Official Journal of Netherlands Society for Oto-Rhino-Laryngology & Cervico-Facial Surgery*, 42(1), 156-163. <https://doi.org/10.1111/coa.12692> (Level V)
- Lipsett, S. C., Porter, J. J., Monuteaux, M. C., Watters, K., & Hudgins, J. D. (2021). Variation in the management of children with deep neck infections. *Hospital Pediatrics*, 11(3), 277– 283. <https://doi.org/10.1542/hpeds.2020-000315> (Level III)
- Tansey, J. B., Hamblin, J., Mamidala, M., Thompson, J., Mclevy, J., Wood, J., & Sheyn, A. (2020). Dexamethasone use in the treatment of pediatric deep neck space infections. *Annals of Otolaryngology & Laryngology*, 129(4), 376–379. <https://doi.org/10.1177/0003489419890349> (Level III)
- Villanueva-Fernández E, Casanueva-Muruáis R, Vivanco-Allende A, Llorente JL, & Coca-Pelaz A. (2022). Role of steroids in conservative treatment of parapharyngeal and retropharyngeal abscess in children. *European Archives of Oto-Rhino-Laryngology: Official Journal of the European Federation of Oto-Rhino-Laryngological Societies (EUFOS): Affiliated with the German Society for Oto-Rhino-Laryngology - Head and Neck Surgery*, 279(11), 5331–5338. <https://doi.org/10.1007/s00405-022-07423-6> (Level III)