

Transfer Algorithm for Peritonsillar Abscess

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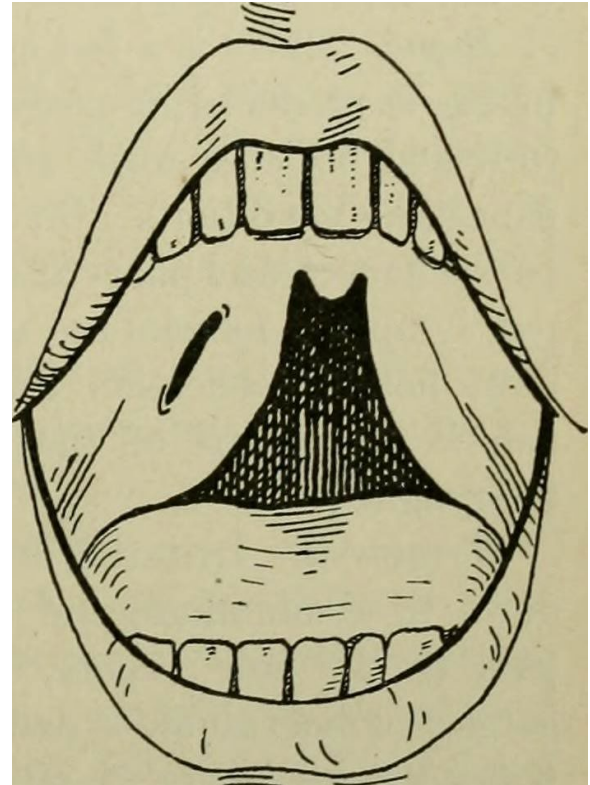
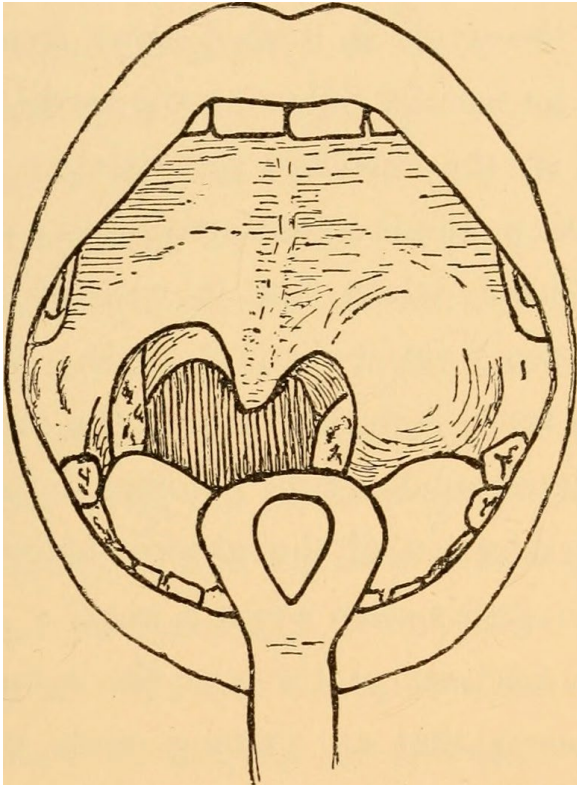


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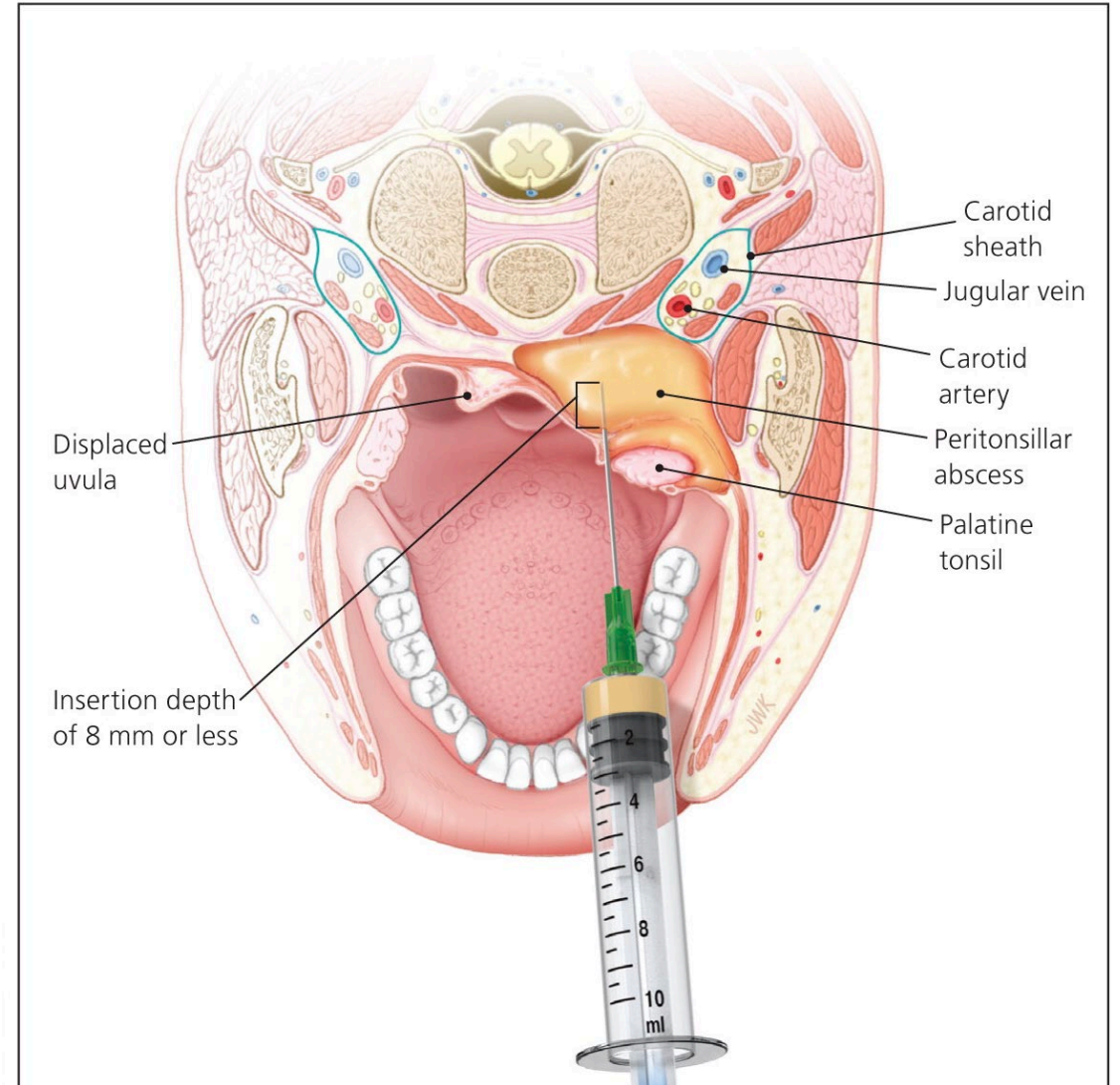
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Incidence and Anatomy

- Purulence between the tonsillar capsule and the pharyngeal constrictor muscle
- ~45,000 cases per year in the US, annual costs of over \$150 million USD
- Patients often transferred to UWH ED from outside institutions.



Treatment: I&D vs medical therapy

Forner et al (2020) - Systematic review and meta-analysis

- 33,000+ patients across 12 studies
- Treatment failure rates: MT (5.7%) vs ST (5.5%) $P = .13$

Urban et al (2021) – Retrospective case series

- 214 patients w/ radiographically and clinically confirmed PTA
- 87 treated with MT, and 127 treated with ST
- Overall, treatment failure occurred in 8.0% of the MT group and 7.9% of the ST group ($P = 1.00$)



Treatment: I&D vs Medical management

- Souza et al (2016) – Retrospective case series
- 297 patients with PTA (diagnosed via ICD codes). Included peds patients
- 200 (67%) surgery, 97 (33%) MT
 - 153 (77%) I&D, 44 (22%) PMNA, 3 quinsy tonsillectomy
- There was no difference in return visits (20% medical vs. 14% surgical, $P = .17$) or failure rates (5% medical vs. 3% surgical, $P = .30$).



Treatment: I&D vs medical therapy

Battaglia et al (2018) – Retrospective case series

- Random sampling of 211 PTA patients treated with MT and 96 patients with ST
- No significant difference in treatment success or complications between MT vs ST (8.1% vs 6.2%, $P = .58$)
- Patients in MT group obtained significantly less liquid opioid prescriptions, reported fewer sore days, and required less days off from work



Objectives

- To avoid unnecessary procedures and improve healthcare utilization for patients with small, uncomplicated PTAs and mild symptoms who are referred by outside institutions, the following transfer and treatment algorithm for previously untreated PTA is proposed.



Methods

- Prospective case series
- Patients referred from OSH via access center and who meet eligibility criteria will undergo primary medical management at the referring institution
- Patients will have a telehealth visit within 48 hours
- Survey will be sent to patients 30 days after their index visit to assess for complications and treatment failure rates
 - Chart review with Epic CareEverywhere will also be used



Inclusion:

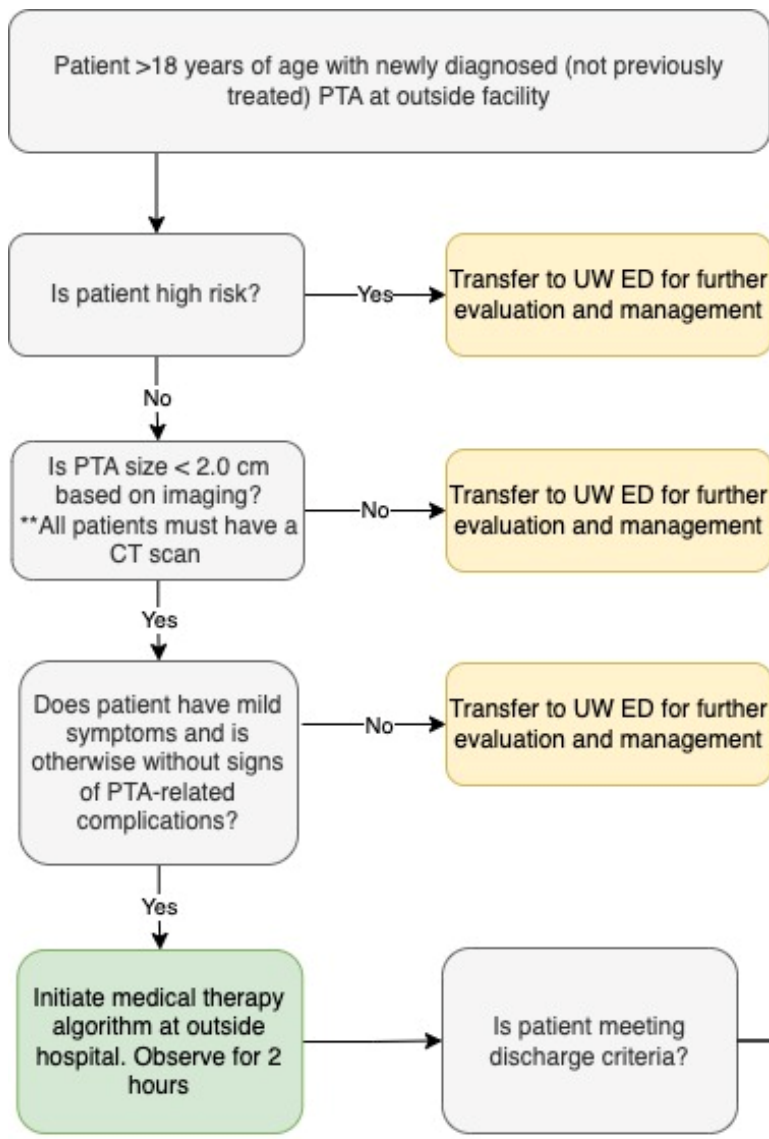
- Patients referred by outside institutions for uncomplicated PTAs who have not yet already received antibiotics as treatment for this PTA, are considered low risk, and display mild symptoms.
- Patients must be older than 18 years of age for inclusion.
- All patients must have a CT scan for diagnosis, and only patients with a PTA size less than 2.0 cm are eligible.
- Only patients referred by an outside facility will be considered for inclusion. Given the low risk and morbidity associated with ST, patients initially presenting to UWHC for diagnosis and management of PTA will undergo evaluation and management as directed by the ED and ENT teams.



Exclusion:

- High risk patients with the following co-morbidities:
 - Hemodynamic instability
 - Evidence of sepsis or septic shock
 - Age > 65 years
 - Severe obstructive sleep apnea
 - Morbid obesity (BMI \geq 40)
 - Immunosuppression, concurrent chemotherapy, or uncontrolled diabetes
 - Concurrent or recent lower respiratory tract infection
 - Sickle cell anemia
 - Neuromuscular disorders
 - Altered craniofacial anatomy
 - Suspicion for underlying head and neck malignancy
- Patients with complications of PTA, including, but limited to the following:
 - Airway obstruction
 - Epiglottitis
 - Spread of infection to other deep neck spaces, such as the para- and retropharyngeal spaces
 - Necrotizing fasciitis
 - Mediastinitis
 - Internal carotid artery lesion
 - Thrombophlebitis (eg, Lemierre syndrome)
 - Carditis
- PTA size greater than 2.0cm based on CT imaging
- Patient has already received antibiotic treatment for this PTA
- Bilateral PTA
- Patient seems unreliable with regards to medication compliance, follow up, adherence to return precautions, etc.
- Patients with moderate to severe symptoms, such as intractable nausea and vomiting, uncontrollable pain, dehydration, respiratory distress
- Patients initially presenting to UWMC for evaluation of PTA. These patients will undergo evaluation and management as selected by UW ED and ENT teams.





Medical therapy for PTA:

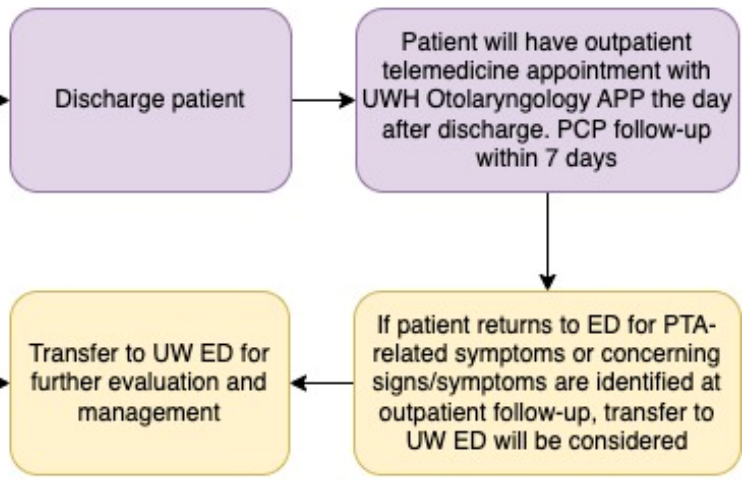
- IV fluid bolus of D5 ½ normal saline
- Dexamethasone 10 mg IV
- Ampicillin-sulbactam 3 g IV
- If penicillin allergy: Clindamycin 600 mg IV + Ceftriaxone 2g IV
- Pain control

After discharge:

- Amoxicillin-Clavulanic acid per os (PO) 875 mg bid x 10 days
- If penicillin allergy: Clindamycin 300mg PO qid x 10 days
- Tylenol, ibuprofen, and opiates for pain control as appropriate

Discharge criteria

- Patients should be observed in the ED for 2 hours following medication administration.
- Patients can be discharged if:
 - Vital signs stable
 - Pain well controlled
 - Able to tolerate oral intake
 - Minimal nausea/vomiting
 - Baseline ambulation status
 - Patient is alert, responsive, able to follow commands



Conclusion:

Improve healthcare utilization for patients with small, uncomplicated PTAs and mild symptoms who are referred by outside institutions



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