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Case Series

Bilateral Peritonsillar Abscess in a Secondary Health Facility in North-Western Nigeria: A Case Series of Two Patients

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ABSTRACT

A peritonsillar abscess (PTA) is a localized collection of pus in the space between the tonsillar capsule and the superior constrictor muscle. It is the most common infection of the deep neck spaces. Bilateral PTA (BPTA) is rare and may mimic the symptoms of acute tonsillitis, often leading to delayed diagnosis. Treatment options include needle aspiration, incision and drainage, and quinsy tonsillectomy. The first case involved a 16-year-old girl who presented with a 1-week history of progressively worsening sore throat, odynophagia, persistent fever, and bilateral earache but no respiratory difficulty. On examination, she was in painful distress, dehydrated, febrile, and not pale. She had bilateral tender jugulodigastric lymphadenopathy, mild trismus, enlarged hyperemic kissing tonsils, inflamed peritonsillar regions, and a centrally positioned but edematous uvula. Bilateral needle aspiration yielded pus, and she responds well to antibiotics and supportive treatment. The second case was a 13-year-old boy who presented with an 8-day history of progressive throat pain, dysphagia, fever, bilateral referred otalgia, difficulty in mouth opening, and a change in voice, but no respiratory distress. He appeared in painful distress, febrile, dehydrated, with a "hot potato" voice and moderate to severe trismus. Attempts to further examine the oropharynx and aspirate the pus were not successful due to severe trismus. He underwent a quinsy tonsillectomy and responded well to broad-spectrum antibiotics. In conclusion, BPTA is uncommon and requires a high index of suspicion for prompt diagnosis and timely management to prevent life-threatening complications.

Key words: Peritonsillar abscess, quinsy tonsillectomy, abscess aspiration, trismus

INTRODUCTION

Peritonsillar abscess (PTA), or "quinsy," is a localized collection of pus in the peritonsillar space between the tonsillar capsule and the superior pharyngeal constrictor muscle; it is the most common deep space infection of the head and neck and a recognized complication of acute tonsillitis commonly affects adolescents and young adults. [1, 2] Tonsillitis, peritonsillar cellulitis, and PTA represent the spectrum of disease progression from the mildest to the most severe form. [2, 3] The peritonsillar space is a potential space of loose areolar tissue that allows rapid spread of infection, producing the classical clinical triad of severe odynophagia, trismus, and muffled "hot potato" voice. Bilateral PTA (BPTA) often presents with a midline uvula and symmetrical tonsillar enlargement, closely resembling severe acute tonsillitis, causing diagnostic delay and potential complications. [2–7]

PTA commonly presents with unilateral tonsillar enlargement, contralateral deviation of the uvula, trismus, and odynophagia; these findings help distinguish PTA from

uncomplicated tonsillitis, although these signs are not universally present. [1–4] Bilateral presentations are rare, accounting for 1.9% to 24% of all quinsy tonsillectomy cases. [2, 6] Bilateral disease poses a particular diagnostic challenge and confusion because it lacks the classical lateralizing signs seen in unilateral PTA patients.

Clinical assessment with needle aspiration remains the cornerstone of diagnosis; radiological imaging can be helpful when the diagnosis is uncertain, when deep neck extension is suspected, or when airway anatomy must be clarified before intervention. [1, 2, 4, 7, 8]

Management principles emphasize airway assessment, empirical broad-spectrum intravenous antibiotics covering both aerobes and anaerobes, adequate analgesia, and timely drainage by needle aspiration, incision and drainage, or quinsy tonsillectomy in selected cases with appropriate follow-up and consideration of interval tonsillectomy for recurrent disease. [6–8]

This case series presents two patients with BPTAs, emphasizing the diagnostic challenges posed by the absence of lateralizing signs such as uvular deviation and unilateral palatal swelling, outlining our approach to airway evaluation and bilateral drainage, and discussing outcomes in comparison with previously reported cases and guideline-based management.

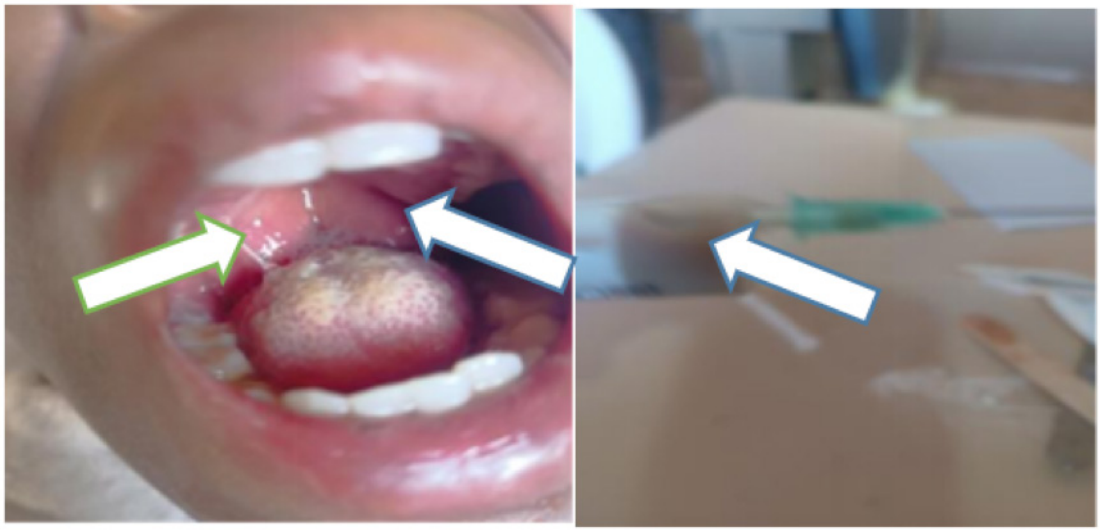
CASE SERIES

Case 1

A 16-year-old adolescent girl presented to our clinic with complaints of worsening sore throat, odynophagia, dysphagia, fever, and drooling of saliva for a 1-week duration. There was bilateral otalgia and slight difficulty opening her mouth, and muffling of voice; however, no respiratory difficulty. Before presentation, the patient visited a primary health center where oral ciprofloxacin and analgesics were prescribed, but there was no improvement. She had a history of recurrent sore throat in the past. She was in painful distress, febrile with some dehydration. There was mild trismus with enlarged hyperemic kissing tonsils and bilateral palatal swelling, and a central but edematous uvula. The patient was counseled for needle aspiration, and she cooperated. Using a metal spatula, the peritonsillar regions were adequately exposed, and about 5 mL of pus was aspirated from both peritonsillar regions (**Figure 1A, B**). The patient was placed on intravenous amoxicillin/clavulanic acid, analgesics, steroids, and intravenous fluid. She was discharged on oral amoxicillin/clavulanic acid on the second day of admission and booked for an interval tonsillectomy. Microscopy, culture, and sensitivity of the aspirate yielded *Streptococcus pyogenes*, *Staphylococcus aureus*, and *Bacteroides*.

Case 2

A 13-year-old boy presented with an 8-day history of progressive throat pain, difficulty with swallowing, fever, bilateral otalgia, and inability to open his mouth, muffling of voice with bilateral painful neck swelling; however, there was no respiratory difficulty. He had some episodes of sore throat in the past. He was seen at a private facility and placed on oral cefuroxime and analgesics; however, the patient could not tolerate oral medications, and as such, the symptoms persisted. On presentation, he was in painful distress, not in obvious respiratory distress, febrile, dehydrated with a "hot potato" voice, and moderate to severe trismus. Further oral examination and attempts to aspirate were not feasible because of trismus. Pulse rate of 113 bpm, respiratory rate of 22 cpm, and temperature of 38.4°C. Full blood count White blood cell count (WBC 15.7 × 10^9/L, neutrophils 82%). He was admitted and placed on intravenous Amoxicillin/clavulanic acid, metronidazole, and fluid, and worked up for quinsy tonsillectomy. Adequate preparations to protect the airway, including provision for tracheostomy, were made. Patient was, however, successfully intubated by an experienced anesthetist



A B

Figure 1: (A) Bilateral peritonsillar abscess (arrows). **(B)** Aspirated pus (arrow).

using a video laryngoscope. Intraoperative findings revealed swollen tonsils with bulging peritonsillar regions bilaterally and a central edematous uvula. The abscess was drained and tonsils removed (**Figure 2A, B**). He was placed on intravenous amoxicillin/clavulanic acid, metronidazole, and steroids. He was discharged 3 days after the surgery on oral medications. Microscopy, culture, and sensitivity of the pus revealed pus cells with no bacteria isolated.

DISCUSSION

BPTA most frequently affects adolescents and young adults. [2] The occurrence in a 16-year-old and a 13-year-old aligns with the typical epidemiologic distribution. BPTA can occur in either sex, and sex alone is not considered a major independent risk factor. [9] The patient's presentation with fever, severe throat pain, odynophagia, trismus, muffled "hot potato" voice, and bilateral otalgia is consistent with advanced PTA. [10] Trismus, which significantly limited oral examination, especially in the second case, reflects involvement of the medial pterygoid muscles and is a marker of disease severity and potential spread to adjacent deep neck spaces. [11, 12]

Unlike unilateral PTA, where contralateral uvular deviation is typical, bilateral disease often presents with a centrally positioned but edematous uvula, as observed in these patients. This atypical finding can obscure diagnosis, thereby making BPTA under-recognized and delaying definitive intervention. [13]

In resource-limited settings such as many parts of sub-Saharan Africa, where advanced imaging may not be readily available, a high index of clinical suspicion remains critical.

The failure of initial outpatient management with oral antibiotics underscores several important considerations. First, poor oral intake due to odynophagia and trismus reduces antibiotic compliance and effectiveness. Second, PTA is characteristically polymicrobial, involving both aerobic organisms, such as *Streptococcus pyogenes* and *Staphylococcus aureus*, as well as anaerobes, including *Fusobacterium* species. [11, 12] Empirical broad-spectrum intravenous therapy with amoxicillin-clavulanic acid and metronidazole, as used in these cases, aligns with current evidence-based recommendations and provides adequate coverage of both aerobic and anaerobic pathogens.

The pathophysiology of PTA involves suppuration in the peritonsillar space, mostly following acute bacterial tonsillitis or infection of the Weber's gland, a minor salivary gland located at the supratonsillar fossa. [10] In BPTA, there is either a contiguous spread across the soft palate or an independent infection of the bilateral Weber's glands. Some predisposing factors include recurrent tonsillitis, periodontal disease, and immunosuppression, and delayed presentation and prior inappropriate use of antibiotics may further increase the risk of suppurative complications. [10] In both our index patients, there was a history of recurrent sore throats in the past, and a delay in presentation and inappropriate use of antibiotics.

Airway management is a significant concern in PTA, especially in pediatric patients with bilateral disease. Although these patients did not present with overt respiratory distress, the combination of trismus, bilateral peritonsillar swelling, and systemic toxicity placed them at significant risk of airway compromise. The successful use of video laryngoscopy reflects the growing role of advanced airway technologies in improving intubation success rates in difficult airways. Importantly, preparedness for emergency tracheostomy, as demonstrated in this case, is consistent with best practice recommendations. [12] This is especially relevant in low-resource settings where delayed airway intervention may result in catastrophic outcomes.

Imaging modalities such as contrast-enhanced computed tomography scanning improve diagnostic accuracy, especially in bilateral cases; their routine use remains controversial due to cost, radiation exposure, and limited availability in many developing regions. [11, 13] Recent studies suggest

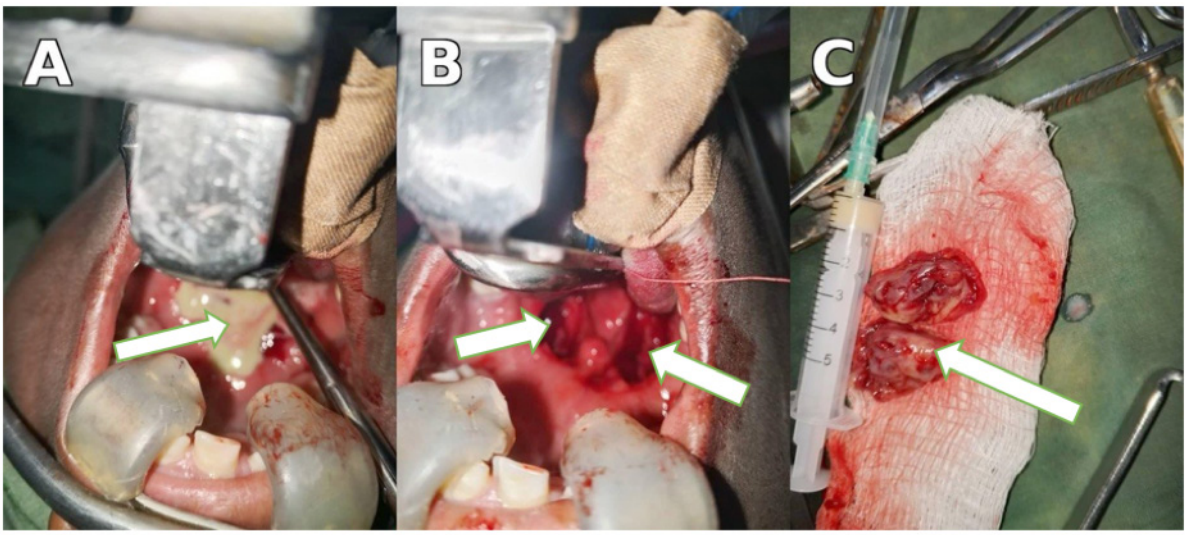


Figure 2: (A) Intraoral view showing peritonsillar abscess (arrow). **(B)** Intraoperative view during quinsy tonsillectomy showing tonsillar fossae (arrows). **(C)** Excised tonsillar specimens following quinsy tonsillectomy (arrow).

that clinical assessment alone may not be sufficient in some cases, with individual signs lacking adequate sensitivity and specificity. [11] In these patients, especially the second case, the severity of trismus precluded adequate examination and needle aspiration, thereby justifying definitive surgical exploration without prior imaging.

Quinsy tonsillectomy was appropriately performed in the second case. Quinsy tonsillectomy remains a definitive treatment option, particularly in patients with BPTA, recurrent tonsillitis, failed needle aspiration, or inability to tolerate local procedures. [14] Systematic reviews indicate that quinsy tonsillectomy offers more complete drainage, faster symptom resolution, shorter hospital stays, and lower recurrence rates than interval tonsillectomy or repeated aspiration. [14] In the present case, the history of recurrent sore throat further supports the decision for definitive surgical management.

BPTA carries a higher risk of complications, including airway obstruction, parapharyngeal and retropharyngeal abscesses, mediastinitis, and sepsis. [15] Early recognition and aggressive multidisciplinary management are therefore essential. The favorable outcomes observed, marked by rapid clinical improvement and discharge within a few days, underscore the effectiveness of prompt definitive intervention, appropriate antimicrobial therapy, and supportive care.

The absence of bacterial growth on culture despite the presence of pus cells is a recognized phenomenon in PTA and may be attributed to prior antibiotic therapy, inadequate anaerobic culture techniques, or the presence of fastidious organisms. [14] This finding emphasizes the importance of empiric broad-spectrum antimicrobial therapy rather than reliance on culture-directed treatment alone in acute settings.

CONCLUSIONS

BPTA is a rare but serious condition that may present atypically and delay diagnosis. Early clinical suspicion, prompt airway assessment, appropriate intravenous antibiotics, and timely surgical intervention are key to achieving good outcomes, even in resource-limited settings.

RECOMMENDATIONS

Maintain a high index of suspicion in severe or atypical cases, ensure early specialist referral, and initiate broad-spectrum antibiotics promptly. Always prioritize airway preparedness and consider definitive surgical management, especially in recurrent or bilateral disease.

CONSENT

Written informed consents were obtained from the parents for publication of these case reports.

AUTHORS' CONTRIBUTION

All authors have significantly contributed to the work, whether by following the cases at the bedside, conducting literature searches, drafting, revising, or critically reviewing the article. They have given their final approval of the version to be published, have agreed with the journal to which the article has been submitted, and agree to be accountable for all aspects of the work.

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CONFLICT OF INTEREST

None.

REFERENCES

1. Gupta G, Muthiah S. Peritonsillar abscess. In: StatPearls [Internet]. Treasure Island, FL: StatPearls Publishing; 2023 [cited 2026 Feb 24]. Available from: https://www.ncbi.nlm.nih.gov/books/NBK519520/
2. Paulucci B, Aquilina R, Kurup P, Spencer C, Rotte V. Bilateral peritonsillar abscess: Navigating diagnostic challenges and optimizing management for favourable outcomes. Authorea. 2024. http://doi.org/10.22541/au.172115426.69148572/v1
3. Fasano CJ, Chudnofsky C, Vanderbeek P. Bilateral peritonsillar abscesses: Not your usual sore throat. J Emerg Med. 2005;29(1):45-47. https://doi.org/10.1016/j.jemermed.2005.01.005
4. Christian JM, Felts CB, Beckmann NA, Gillespie MB. Deep neck and odontogenic infections. In: Flint PW, Haughey BH, Lund VJ, Robbins KT, Thomas JR, Lesperance MM, et al., eds. Cummings Otolaryngology: Head and Neck Surgery. 7th ed. Philadelphia: Elsevier; 2020. p. 141-154.
5. Alsubaie HM, Alsmadi MB, Aljuaid EF. Bilateral peritonsillar abscess: A case study and literature review. J Surg Case Rep. 2020;2020(8):rjaa112. https://doi.org/10.1093/jscr/rjaa112
6. Perdana RF, Rosalina E. Case report: bilateral peritonsillar abscess with complications of upper airway obstruction. F1000Res. 2023;11:550. https://doi.org/10.12688/f1000research.111729.3
7. Serrano C, Bedini I, Demarchi MV. Bilateral peritonsillar abscess. A case report and review of controversies surrounding diagnosis and management. Arch Argent Pediatr. 2024;122(1):e202303034. https://doi.org/10.5546/aap.2023-03034.eng
8. Bajaj Y, Hore I. Disease of tonsils, tonsillectomy and tonsillotomy. In: Gleeson M, Browning GG, Burton MJ, Clarke R, Hibbert J, Jones NS, et al., eds. Scott-Brown's Otorhinolaryngology, Head and Neck Surgery. 8th ed. London: CRC Press; 2018. p. 435-441.
9. Klug TE. Incidence and microbiology of peritonsillar abscess: The influence of season, age, and gender. Eur J Clin Microbiol Infect Dis. 2014;33(7):1163-1167. http://doi.org/10.1007/s10096-014-2052-8
10. Galioto NJ. Peritonsillar abscess. Am Fam Physician. 2017;95(8):501-506.
11. Voruz F, Revol R, Combescure C, Monnier Y, Becker M, Dulguerov N. Diagnosis of peritonsillar abscess–A prospective study comparing clinical with CT findings in 133 consecutive patients. *Diagnostics*. 2025;15(2):228. https://doi.org/10.3390/diagnostics15020228
12. Johnson RF, Stewart MG. The contemporary approach to diagnosis and management of peritonsillar abscess. Curr Opin Otolaryngol Head Neck Surg. 2005;13(3):157-160. https://doi.org/10.1097/01.moo.0000162259.42115.38
13. Kadrie A, Ward C, Chanamolu M, Berry J, Gillespie MB. Peritonsillar abscess outcomes with and without computed tomography: A retrospective cohort study.

Laryngoscope. 2024;134(12):4911-4917. https://doi.org/10.1002/lary.31629
14. Galluzzi F, Garavello W. Treatment of peritonsillar abscess in children: A systematic review. *J Clin Med*. 2024;13(23):7361. https://doi.org/10.3390/jcm13237361
15. Yıldız LA, Ünal D, Tekşam Ö. Recurrent and bilateral peritonsillar abscess: A rare cause of upper airway obstruction. *J Pediatr Emerg Intensive Care Med*. 2021;8(2):126-128. https://doi.org/10.4274/cayd.galenos.2020.72473