Hard Palate Abscess Secondary to Acute Sinusitis

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Introduction

Acute bacterial sinusitis may extend beyond the paranasal sinuses, resulting in local or intracranial complications such as orbital cellulitis and meningitis.[1,2] While odontogenic sinusitis is well described,[3] and palatal abscesses have been reported in association with dental infection,[4] a palatal abscess arising secondary to sinusitis in the absence of odontogenic pathology has not, to our knowledge, been previously reported.

Aims

We present a rare case of a hard palate abscess secondary to acute sinusitis, highlighting an unusual route of disease extension and reinforcing the importance of comprehensive oral examination in sinonasal infections.

Methods

A 5-year-old female presented with three days of fever, headache, and purulent rhinorrhoea following recent travel to India. Over 24 hours, she developed left periorbital swelling, facial pain, nasal congestion, and oral discomfort. Examination demonstrated mild left preseptal cellulitis and a fluctuant swelling of the left hard palate crossing the midline, with no dental caries or gingival pathology. Inflammatory markers were markedly elevated.

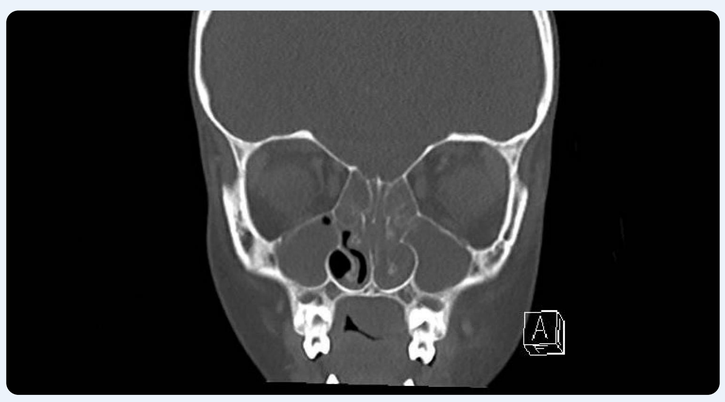
CT imaging revealed pansinusitis with a large rim-enhancing palatal collection and no evidence of odontogenic source. The presumed mechanism of spread was extension from the left maxillary sinus into the palatal submucosal space via the alveolar recess, with possible spread through the incisive foramen or the greater/lesser palatine foramina.

The patient received empiric IV augmentin and vancomycin for presumed MRSA given her recent travel to India. The patient subsequently underwent emergent surgery comprising left functional endoscopic sinus surgery and incision and drainage of the palatal abscess transorally. Intraoperatively, frank pus was noted to be filling the left maxillary sinus and hard palate collection.

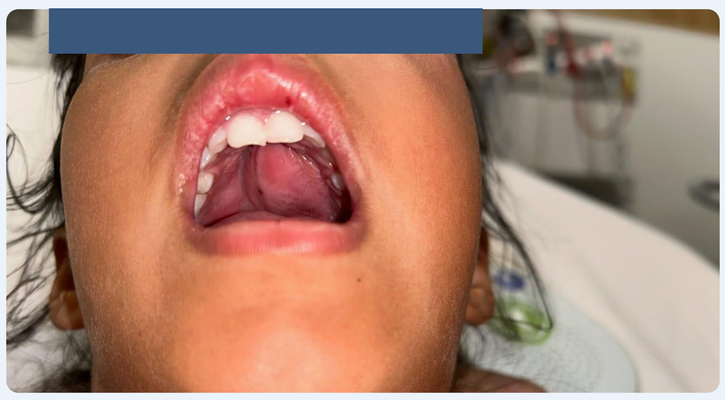
Results

Blood cultures and intraoperative swabs grew MRSA. The patient demonstrated rapid postoperative improvement with resolution of fever and normalisation of inflammatory markers. The patient was discharged on two weeks of oral clindamycin with both saline and steroid nasal sprays. At two-week follow-up, symptoms had completely resolved with no residual paranasal sinus purulence or palatal swelling.

Imaging & Clinical Photograph



CT Sinuses *– Pansinusitis with a left palatal collection*



Clinical Photograph *– Left hard palate abscess*

Clinical Timeline

Day 0–3

Fever, headache, purulent rhinorrhoea

Day 4

Periorbital swelling, facial pain, palatal fluctuance

Imaging

CT: Pansinusitis + left hard palate palatal collection

Management

IV augmentin + vancomycin
Left FESS + incision and drainage of palate abscess

Discharge

2 weeks oral clindamycin, saline nasal rinses and mometasone spray

2-week follow-up

Complete clinical resolution, no residual swelling

Key Investigations

23.0

WCC ($\times 10^9$/L)

323

CRP (mg/L)

MRSA

Blood cultures & intraoperative cultures

Pansinusitis & left palatal collection

No odontogenic source

Conclusion

This case describes a previously unreported complication of a hard palate abscess from acute sinusitis. It highlights the importance of thorough oral examination in sinonasal infection, particularly with the known role of odontogenic infection in sinusitis.

References

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