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IMAGING IN INTENSIVE CARE MEDICINE

Pharyngeal abscess: a rare complication of repeated nasopharyngeal swabs

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A 73-year-old end-stage renal disease patient who had undergone craniopharyngioma resection 30 years previously was admitted to hospital after a fall. He developed hospital-acquired laboratory-confirmed SARS-CoV-2 that required high-flow nasal oxygen therapy. Follow-up real-time polymerase chain reaction (RT-PCR) of nasopharyngeal swabs was performed weekly by a trained nurse until hospital discharge 3 weeks later.

The following month, the patient developed tiredness, discomfort in the back of his throat, swallowing difficulties, weight loss (> 10kgs) and fever (39 °C). Empirical antibiotics were unsuccessful and he was admitted to our intensive care unit (ICU) for uncontrolled sepsis and required orotracheal intubation. An emergency computed tomography (CT) scan was performed and found a 28 × 20 mm pharyngeal abscess (Fig. 1). Subsequent magnetic resonance imaging (MRI) showed an abscess on the posterior wall of the cavum with osteitis of the sphenoid clivus and petrous apex associated with osteitis of C1-C2 and bilateral mastoiditis (Fig. 1S). The cavum could have been weakened by the craniopharyngioma surgery and the steroids prescribed for SARS-CoV-2 pneumonia, thereby increasing the risk of abscess.

The patient was empirically treated by meropenem and amikacin but died in the following 24 h before surgical drainage could be performed. Culture from sputum collected before intubation identified an extensively drug-resistant (XDR) *Pseudomonas aeruginosa*.

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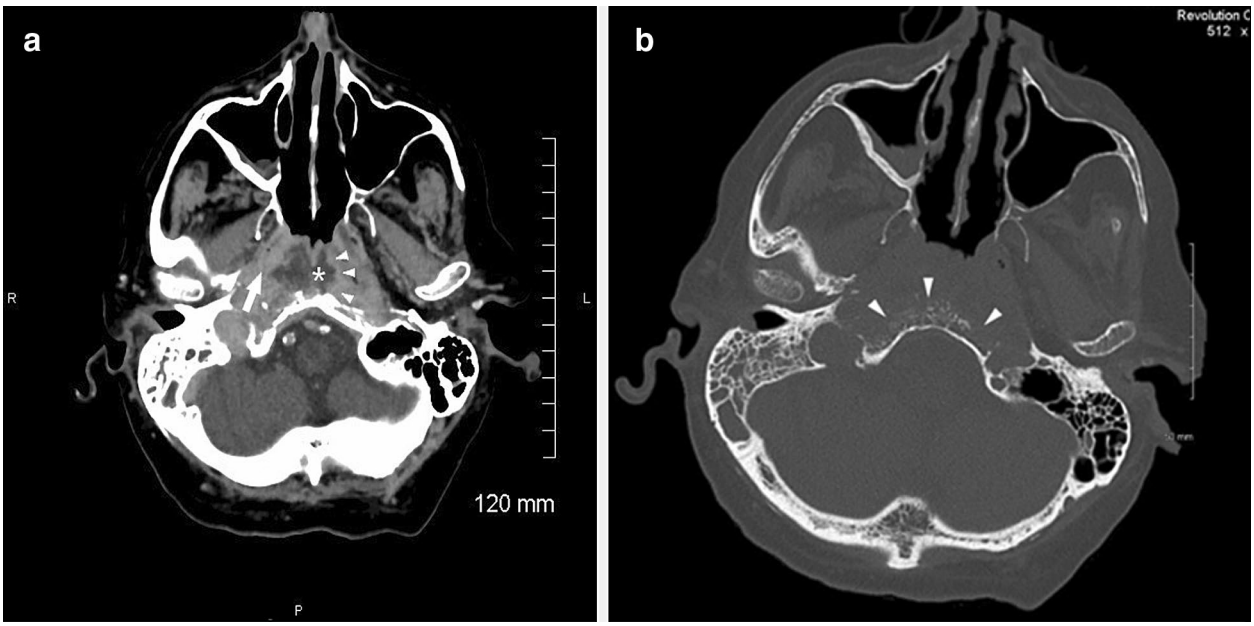

Fig. 1 Axial CT images. Cavum abscess with a cockade image appearance with central necrosis (star), contrasting wall (white arrowheads) and inflammatilon of adjacent fatty and muscle structures (arrow) on injected CT scan (**a**). Corresponding bone window (**b**) showed occipital anterior cortical and spongy bone osteolysis in contact (white arrowheads)

Supplementary Information
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Compliance with ethical standards

Conflicts of interest
The authors have no conflict of interest to declare.

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