

FINE NEEDLE ASPIRATION CYTOLOGY IN CAROTID BODY TUMOURS

We read the article by Masilamani et al⁽¹⁾ with great interest. The authors had described the fine needle aspiration cytology (FNAC) findings of a case of pulsatile swelling in the right side of the neck, which turned out to be a carotid body tumour (CBT) on histopathological examination. They had not clarified whether they had suspected CBT prior to FNAC. It is also not clear whether imaging investigations were carried out in this patient before FNAC was undertaken. If the imaging findings were corroborative of CBT, why did the authors plan to perform FNAC?

Classical physical findings of CBT include a pulsatile lateral neck mass that exhibits medial and lateral mobility but not superior or inferior mobility (Fontaine sign).^(2,3) If there is suspicion of CBT in a lateral neck mass, the appropriate initial study is colour duplex ultrasonography. Angiography is the next logical step if colour duplex ultrasonography confirms or suggests a diagnosis of CBT. Angiography typically demonstrates tumour blood supply and widening of the carotid bifurcation by a well-defined tumour blush ('lyre sign'), which is a classical pathognomonic angiographic finding. The conventional teaching is that FNAC should not be attempted in a clinically suspected case of carotid body tumour, as it may cause torrential haemorrhage. While reporting their experience with 49 patients of CBT over 25 years, Kruger et al recommended that FNAC should not be done as a pre-operative investigation, and cited one case of CBT that resulted in severe haemorrhage following FNAC.⁽⁴⁾ Moreover, cytological diagnosis of CBT is difficult, as the aspiration findings are not confirmatory. While describing the cytological features of 13 patients with CBT, Monabati et al concluded that aspiration findings can be easily mistaken for those of metastatic tumours.⁽⁵⁾ Furthermore, multiple passes from the lesion to obtain more material may be fraught with danger. There are anecdotal reports of diagnostic FNAC in CBT, but only in clinically unsuspected cases. We also believe that FNAC is the logical next step in patients presenting with lateral neck swellings. However, current evidence does not favour FNAC as a first investigation in patients with a clinically suspected CBT.

Yours sincerely,

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