

MI-COD

MSS INDIA- Case Of the Day



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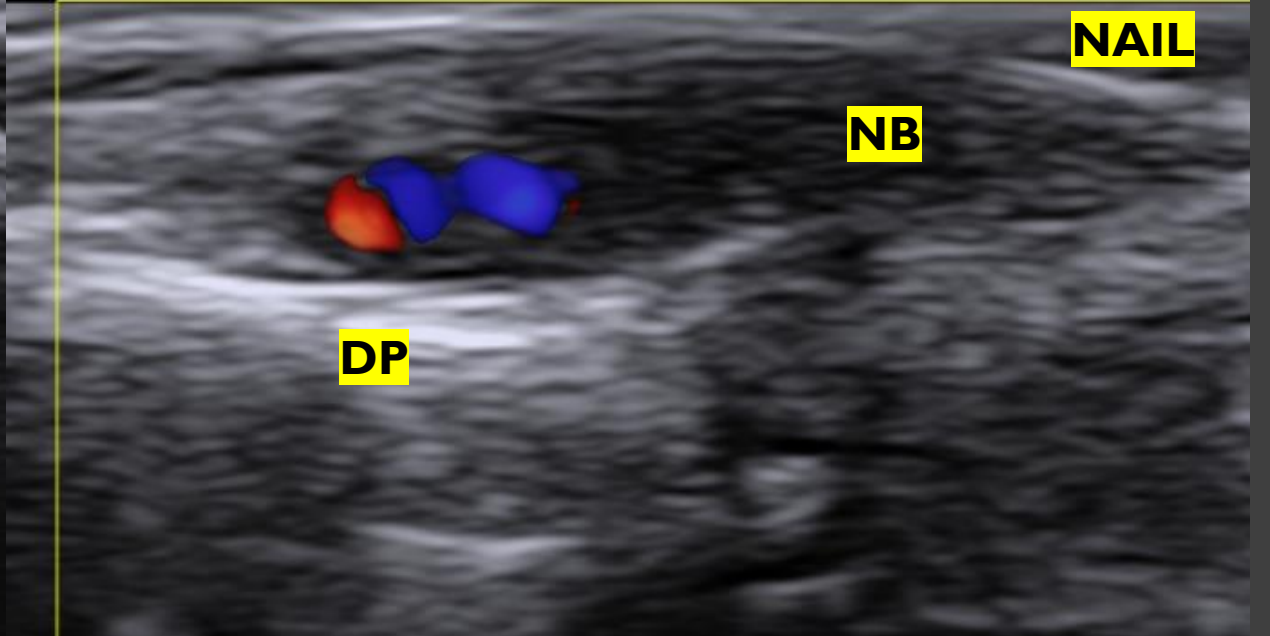
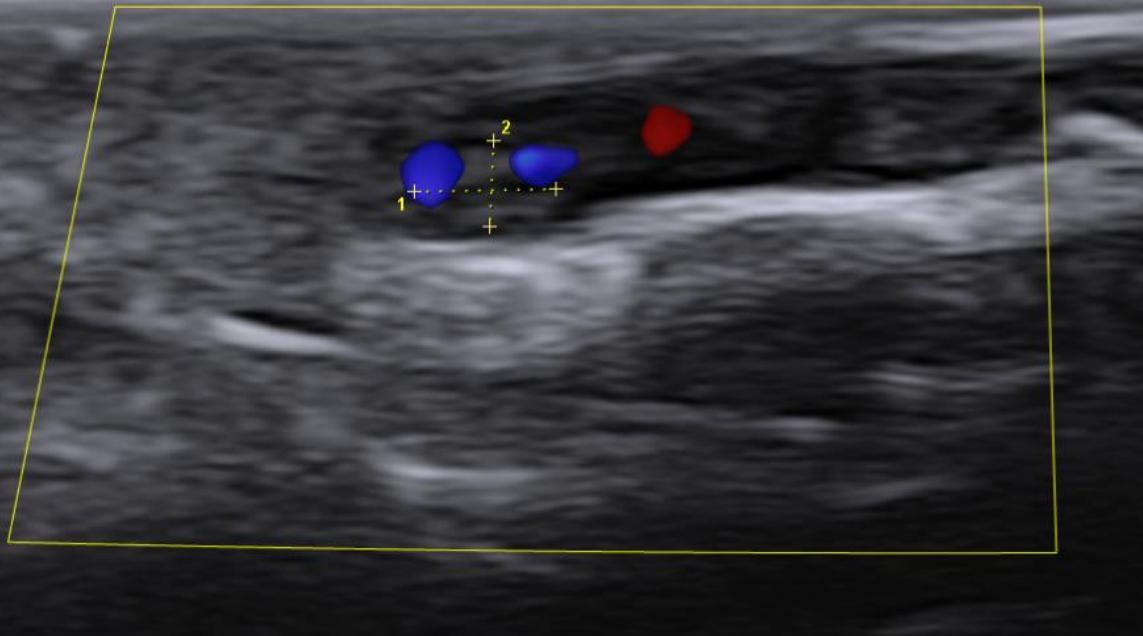
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Images



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1	D 0.18 cm
2	D 0.11 cm

Answer

Which of the following is an incorrect statement regarding the given lesion?

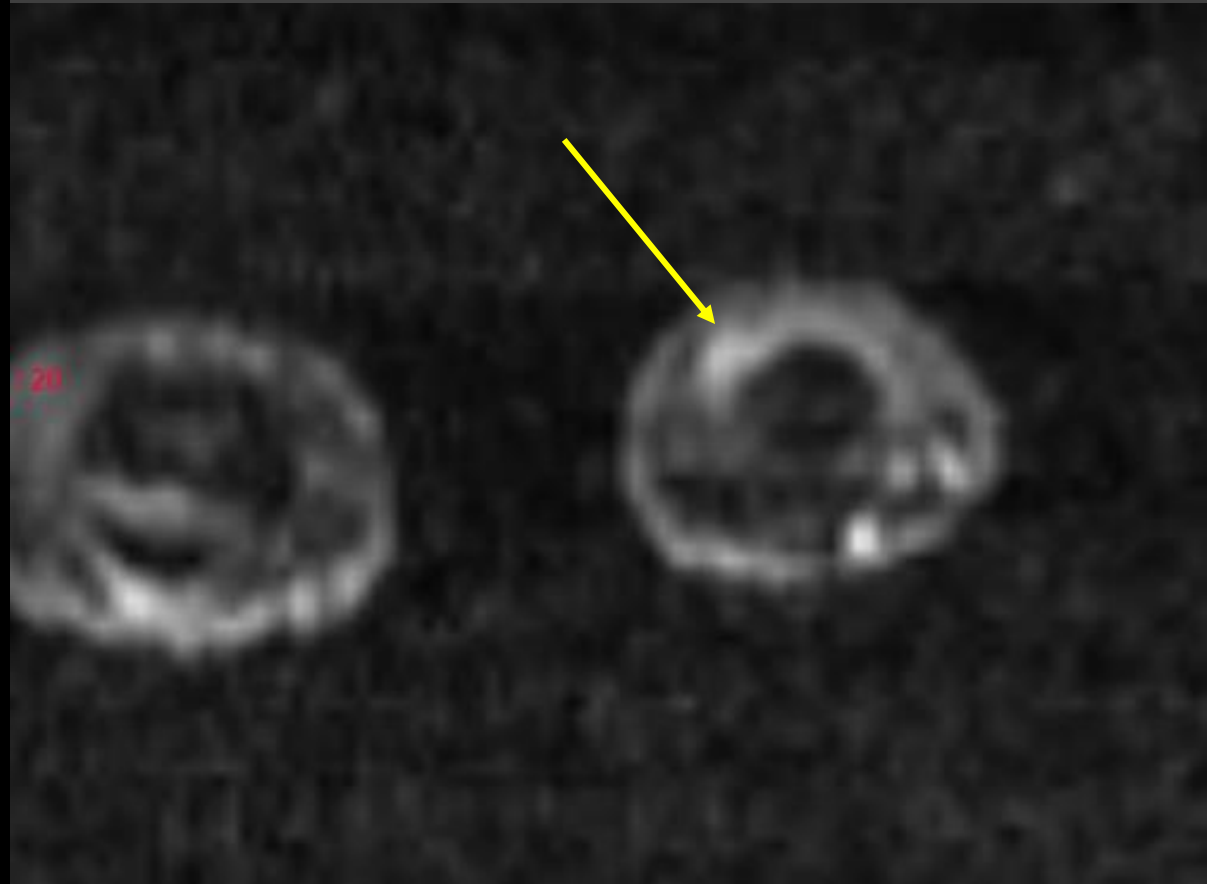
- A. This lesion is a hamartoma rather than a true tumor.
- B. The etiology of these lesions can be familial.
- C. These lesions are richly vascularized, appearing as ovoid blush on contrast MRI.
- D. Surgery is curative with no chance of recurrence.

Glomus tumor

1. Glomus tumors originate from the neuromyoarterial plexus (modified smooth muscle cells of the glomus body). They are best thought of as hamartomas rather than true tumors¹.
2. The etiology remains largely unknown, with traumatic reactive hypertrophy considered one of the popular causes. There is also a familial variant of glomus tumor that has been linked to chromosome 1p21-22 and involves truncating mutations in the glomalin gene².

Glomus tumor

3. Because the glomus is richly vascularized, it shows marked contrast enhancement on MRI after an IV injection of gadolinium³. Indeed, in some early glomus tumors, only MR angiography may detect them.



Glomus tumor

4. The prognosis following surgical excision is excellent. However, if the capsule of a glomus tumor is incompletely resected, recurrence may happen, and in such cases, MR is again useful to localize the recurrent lesions, which are often quite small⁴ and show similar findings to an untreated lesion.

The incidence of postoperative recurrence is 12-24%.

If recurrence of the symptom is within less than one year of surgery then incomplete resection is the likely cause and if recurrence is after more than one year then the development of the new lesion is the likely cause⁴.

This is one such example of a recurrent lesion with symptoms reappearing 6 months after surgery

Glomus tumor

Take home message

Yilmaz et al⁵, noted in their study an average delay of seven years and four months due to misdiagnosis.

Recurrent lesions can be really small, barely measuring a few millimeters and heightened suspicion is needed to prevent delay in diagnosis.

This lesion was indeed missed initially on an outside MRI.

References

1. Drape JL, Idy-Peretti I, Goettmann S, et al. Subungual glomus tumors: evaluation with MR imaging. *Radiology* 1995; 195:507–515.
2. Brouillard P, Boon LM, Mulliken JB, et al.: Mutations in a novel factor, glomulin, are responsible for glomuvenous malformations ("glomangiomas"). *Am J Hum Genet.* 2002, 70:866-74.
3. Connel DA, Koulouris G, Thorn D, et al. Contrast-enhanced MR angiography of the hand. *RadioGraphics* 2002; 22:583–599.
4. Theumann NH, Goettmann S, Le Viet D, et al.: Recurrent glomus tumors of fingertips: MR imaging evaluation. *Radiology.* 2002, 223:143-51.
5. Tomak Y, Akcay I, Dabak N, Eroglu L. Subungual glomus tumours of the hand: diagnosis and treatment of 14 cases. *Scand J Plast Reconstr Surg Hand Surg.* 2003;37(2):121–124.