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RESEARCH ARTICLE

POSTTRAUMATIC PSEUDOANEURYSM OF FOOT (MEDIAL PLANTER ARTERY): CASE REPORT.

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Abstract

We present a case of 15 year old boy with posttraumatic sole swelling of right foot. Colour Doppler ultrasonography confirmed pseudoaneurysm of medial planter artery. There are only few case reports of pseudoaneurysm of medial planter artery. Pseudoaneurysm of medial planter artery is caused by traumatic events. Clinical findings are pain, pulsatile mass and systolic bruit. Diagnosis is by colour Doppler ultrasound and by angiography.

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Introduction:-

The two branches of posterior tibial artery in foot are medial and lateral planter arteries. Pseudoaneurysms of planter artery are very rare. Patients present with posttraumatic or postiatrogenic pulsatile swelling. Pseudoaneurysms are aneurysms whose walls are not comprised of vessel wall layers.^{1,2}

Case report:-

15 year old Kashmiri male child had penetrating injury to sole of right foot. The child was from low socioeconomic status. He used to walk barefoot. The patient presented 2 months after penetrating trauma to foot with pain and pulsatile swelling of foot. Clinical examination revealed 25 x 15 mm pulsatile swelling with a bruit. Lower limb pulses were normal. Rest of physical examination and laboratory investigations were normal. Colour Doppler ultrasonography revealed anechoic lesion measuring 27x 16 mm. The lesion showed colour flow and spectral waveform (Figure A through D). He underwent surgical treatment.

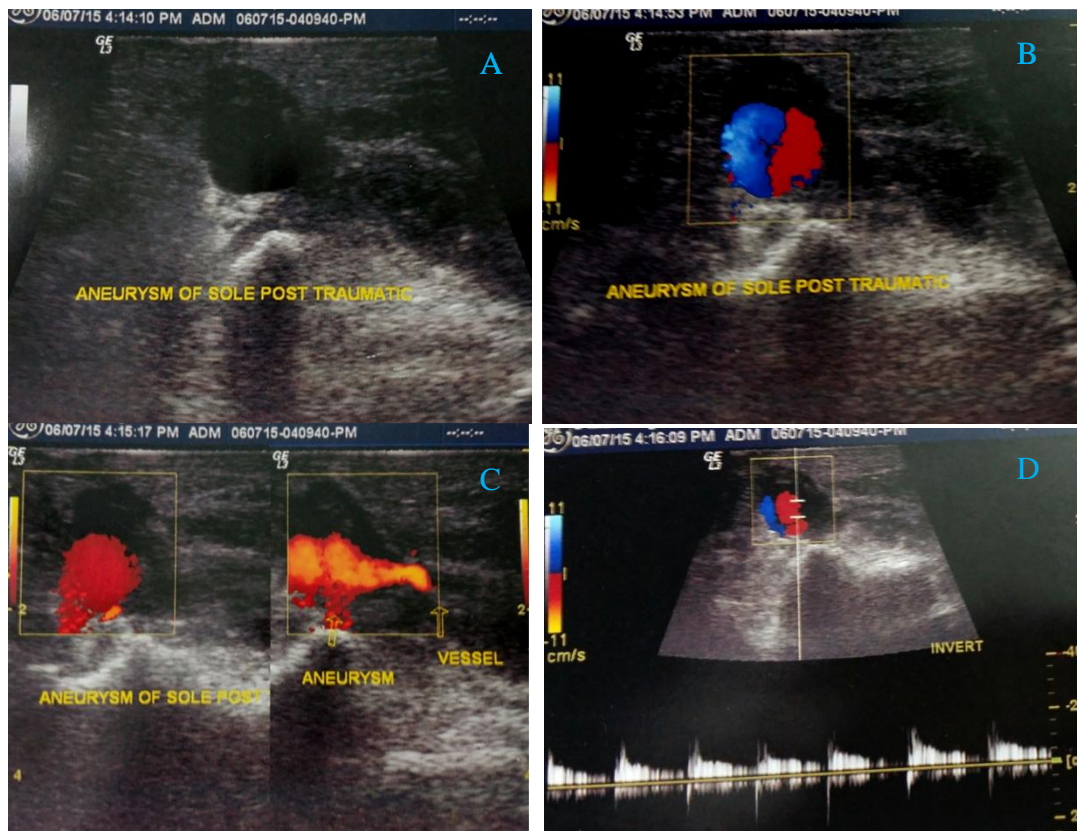


Figure A to D: (A) = Greyscale high frequency ultrasound image showing pseudoaneurysm of medial plantar artery; (B) = Color Doppler image depicting pseudoaneurysm; (C) = Power Doppler image showing pseudoaneurysm and its neck in the plantar region of foot; and (D) Spectral Doppler trace of pseudoaneurysm

Discussion:-

Pseudoaneurysm of lateral planter artery have been reported after planter fasciotomy^{3,4}, osteotomy of the calcaneum⁵ and after penetrating trauma to foot in children^{6,7}. Posttraumatic pseudoaneurysm of medial plantar artery are very unusual⁸. Posttraumatic persistence of pain, a pulsatile swelling, systolic bruit, neurological signs and a fall in haemoglobin with no obvious cause should suggest a diagnosis of pseudoaneurysm^{8,9}. Time to diagnose vary from 3 days to 5 yrs after trauma⁸. Color Doppler ultrasound, magnetic resonance angiography and angiography are the diagnostic modalities^{8,10}.

References:-

1. Brito CJ, Filho VLF, Silva RM. Aneurismas arteriais. In: Brito CJ editor. Cirurgia Vascular, cirurgia endovascular, angiologia. 2. ed. Livraria editor Revinter Ltda; 2008. P. 501-7
2. Agarwal M, Harkless L, Hagino RT, Toursarkissian B. Lateral planter artery aneurysm: a case report. J Am Podiatr Med Assoc. 2007; 97(6): 480-2.
3. Nierenberg G, Hoffman A, Engel A, Stein H. Pseudoaneurysm with an arteriovenous fistula of the tibial vessels after fasciotomy: a case report. Foot Ankle Int. 1997; 18 (8): 524-5.
4. Gentile AT, Zizzo CJ, Dahukay A, Berman SS. Traumatic pseudoaneurysm of the lateral planter artery after endoscopic planter fasciotomy. Foot Ankle Int. 1997 Dec; 18(12): 821-2.
5. Ptaszek AJ, Aminian A, Schneider JR, Milos S. Lateral planter artery aneurysm after calcaneal osteotomy: a case report. Foot Ankle Int. 2006; 27(2): 141-3.
6. Thornton BP, Minion DJ, Quick R, Vasconez HC, Edean ED. Pseudoaneurysm of the lateral planter artery after foot laceration. J Vasc Surg. 2003; 37(3): 672-5.
7. Economou P, Paton R, Galasko CS. Traumatic pseudoaneurysm of the lateral planter artery in a child. J Pediatr Surg. 1993; 28(4): 626.

8. Irarrazaval CA, Gross RS, Maritano AS, Diez CS. Posttraumatic Pedal Artery Pseudoaneurysm: A Case Report. *Case Rep Vasc Med.* 2012; 2012:234351.
9. Park SE , Kim JC, Ji JH, Kim YY, Lee HH, Jeong JJ. Post-traumatic pseudoaneurysm of the medial planter artery combined with tarsel tunnel syndrome: two case reports. *Arch Orthop Trauma Surg.* 2013 Mar; 133(3): 357-60.
10. Murakami AM, Chang A, Foo LF. Traumatic Lateral Plantar Artery Pseudoaneurysm and the Use of Time-Resolved MR Angiography. *HSS J.* 2010 Sept; 6(2):214-8.