

‘Yin yang’: a pseudoaneurysm following a liver biopsy

A 47-year-old woman was referred by her GP to the gastroenterology clinic for review following some abnormal results of liver function tests. Liver screening and imaging were inconclusive. She was referred to interventional radiology for liver biopsy, but she developed liver subcapsular haemorrhage which was embolised using interventional radiology. Subsequently, she developed a swelling in the right groin, and a post-embolisation ultrasound scan showed a sac-like structure along the common femoral artery, with a ‘yin-yang’ or ‘Pepsi sign’ appearance on colour Doppler, suggestive of a pseudoaneurysm (**Figure 1** and **Video 1** [VID-yin yang-WA01.mp4]) (Bashir and Ashraf, 2021). Following thrombin injection, a repeat ultrasound scan revealed resolution with a remaining haematoma. Liver biopsy showed that she had non-alcoholic related steatohepatitis.

The incidence of pseudoaneurysm is 1% following diagnostic catheterisations and 3.2–7.7% after interventional procedures (Franklin et al, 2003).

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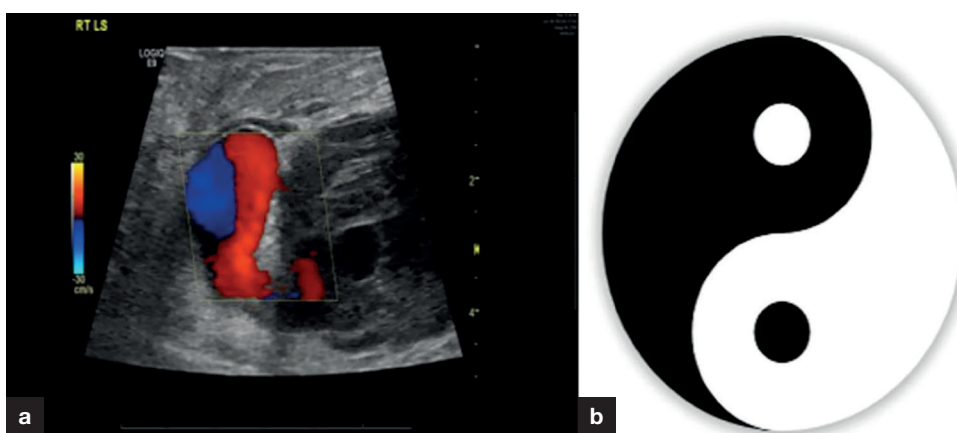


Figure 1. a. Ultrasound scan of the right groin: 16mm deep to the skin surface there is a mixed echo collection with a 30x25x20mm sac-like structure that has a ‘yin-yang’ or ‘Pepsi sign’ appearance with the application of colour Doppler, features suggestive of a pseudoaneurysm. Colour scale to the left, with blue representing flow going toward the probe, and red representing flow going away from the probe. b. Yin-yang symbol.

Video 1. Duplex scan: ultrasound scan of the pseudoaneurysm in the right groin, demonstrating the yin-yang sign. Notice the blood swirling in a different direction within the pseudoaneurysm cavity.

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How to cite this article:

Tieger S, Gilbert S, Creamer R, Zafar M, Whitehead M. ‘Yin yang’: a pseudoaneurysm following a liver biopsy. *Br J Hosp Med.* 2022. <https://doi.org/10.12968/hmed.2021.0252>