

# Penile Sonography: Benefits of Clinical Input with Difficult Cases

Lau K, Wolstenhulme S, Lapham R, Hulson O

## Background

- ❖ Penile sonography is an accessible and invaluable diagnostic tool in characterising lesions, identifying fractures and assessing functional vascularity.
- ❖ It is technically straight forward; the interpretation of penile lesions can be difficult (1).
- ❖ This pictorial review aims to demonstrate educational points from two cases regarding a superficial and a deep penile lesion and the benefit of involving the referring clinical team in aiding in diagnosis.

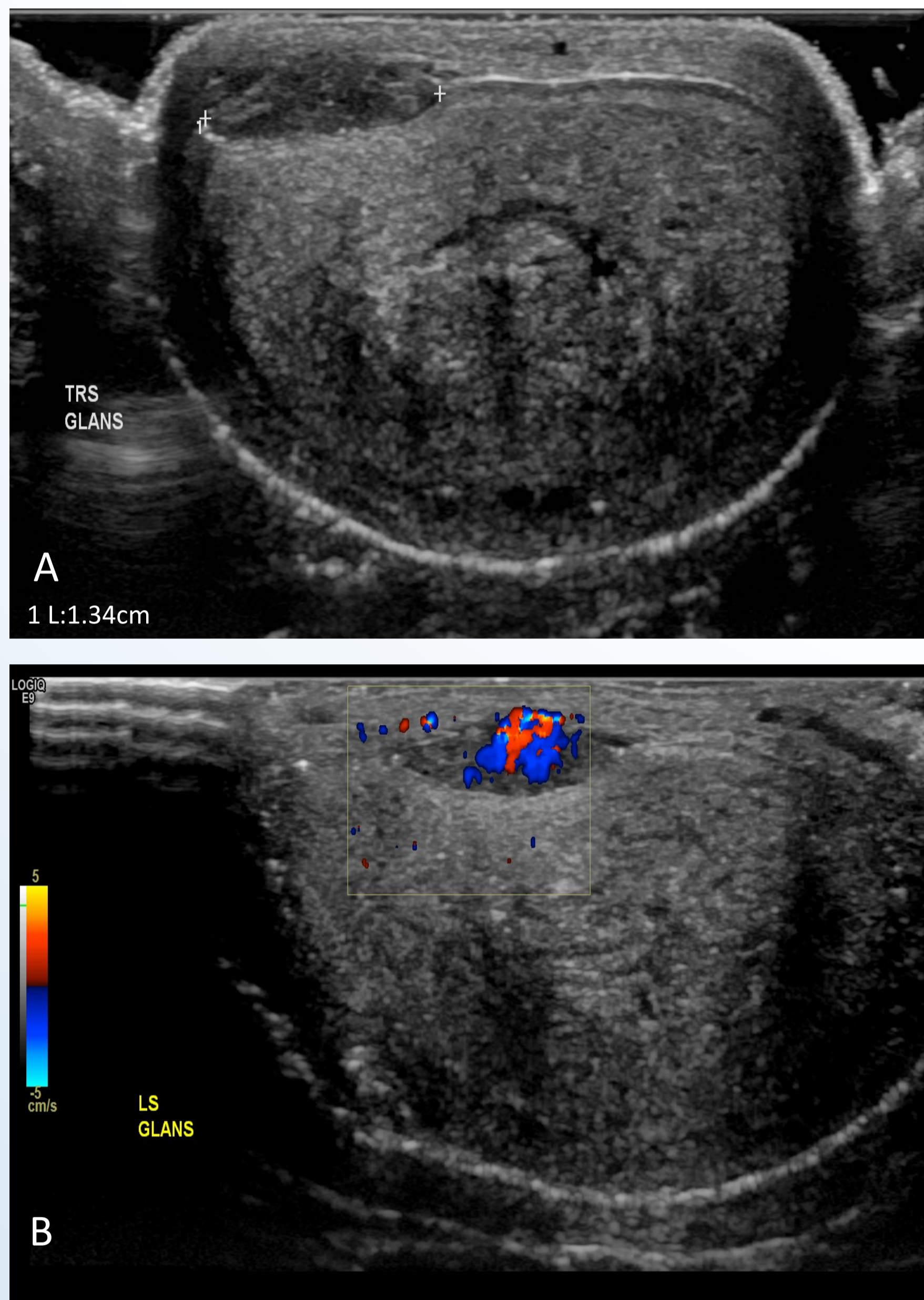


Figure 1B. Transverse scan of the penis. A, showing a superficial dorsum hypoechoic lesion; B, DCI shows blood flow in the lesion

## Case 1

**Clinical presentation:** A young man with a smooth and mobile lump on the mid-shaft of the penis for the last six weeks. Sonography was requested to differentiate whether lesion was ....., which would determine management.

**Clinical diagnosis:** Superficial cyst.

**Sonography findings:** Figure 1A, B-mode, demonstrated an hypoechoic (1.8cm) ellipsoid lesion on the dorsum of the penis; possibly arising from the glans. Doppler Colour Imaging (DCI) showed blood flow in the lesion (Figure 1B). Foreskin retraction was not performed; may differentiate the lesion from the skin or the glans.

## Case two

**Clinical presentation:** A young man with penile discharge and a history of phimosis. Sonography was requested to differentiate whether the palpable lesion was superficial or deep, which would determine management.

**Clinical diagnosis:** Penile abscess.

**Sonography findings:** The patient had two scans over two days. First scan reported a left corpora cavernosa abscess involving the glans (Figure 2A and B). The clinical team felt the abscess was deeper and a second scan was done with a urologist on site to demonstrate where the abscess was felt clinically. Figure 2C and D confirmed a penile abscess in the deep tissue of the corpora cavernosa without foreskin and superficial tissue involvement.

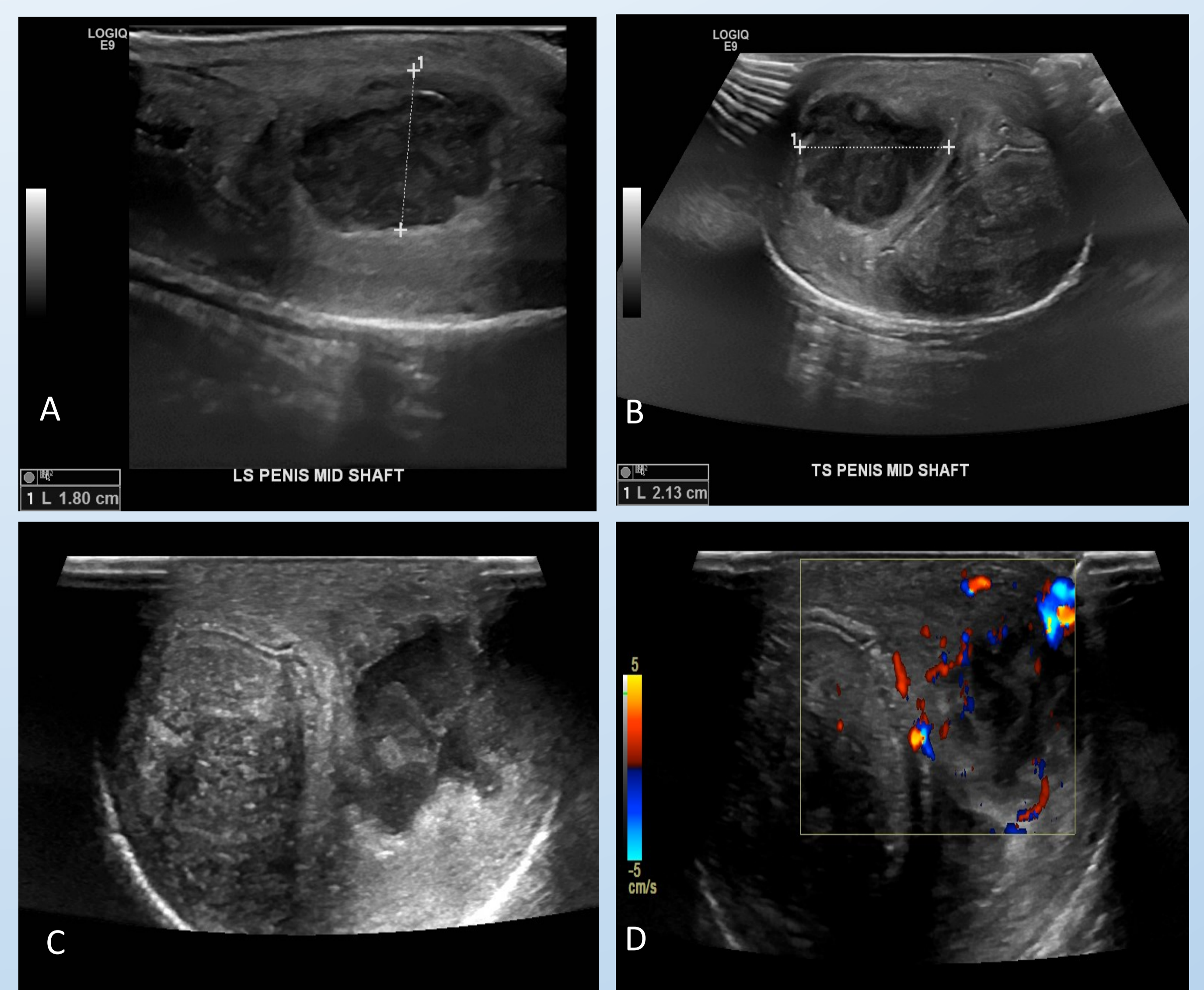


Figure 2. Penile ultrasound. A, longitudinal shows an hypoechoic mid-shaft corporal lesion; B, transverse shows a corporal lesion. C, transverse B-mode, shows deep corpora cavernosa abscess; D, shows no blood flow in the abscess

## Conclusion:

- ❖ These two cases demonstrate the diagnostic dilemma of performing and interpreting penile sonography.
- ❖ The first demonstrates a scenario whereby technique (i.e. retraction of foreskin) may have altered lesion characterisation. The second highlights the importance of clinical input from the referring team.
- ❖ The lessons from these cases may prove to be useful in improving the quality of penile sonography.

## References

- 1) Arman J, Ramos RM, Gomez JM, Barez MG, Molinero JG, Madrid ES. Penile Sonography. A pictorial review. ESR. ECR 2013. Available from [http://pdf.posterng.netkey.at/download/index.php?module=get\\_pdf\\_by\\_id&poster\\_id=115359](http://pdf.posterng.netkey.at/download/index.php?module=get_pdf_by_id&poster_id=115359)