Cervical Assessment – the unusual and unexpected

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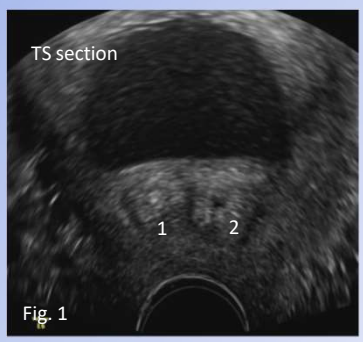
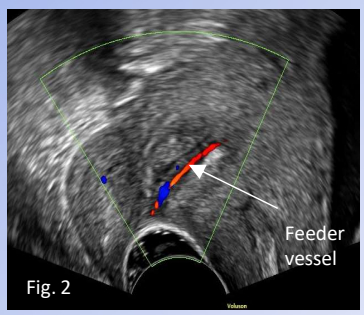
Cervical assessment is a key part of the screening of high-risk women for preterm birth. In 2015 NICE recommended that high-risk women with a cervical length of less than 25mm should be offered prophylactic treatment of either progesterone or cervical cerclage to prevent preterm birth. In May 2017 the Rosie Hospital, Cambridge, established a dedicated Preterm Surveillance Clinic for high-risk women. Current literature describes well the standardise technique for cervical length assessment but there is little published about more unusual cervical ultrasound appearances which can be detected during cervical assessment. In our first year we scanned 144 women and detected some unusual and unexpected ultrasound findings which we would like to share.

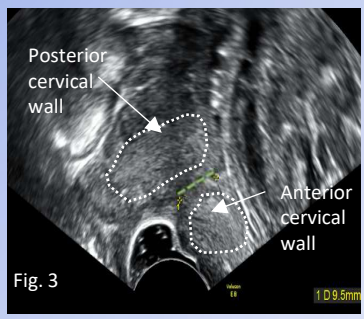
Uterus didelphys:
Fig. 1 demonstrates two cervical canals in cross-section on a transverse image this confirms the presence of a didelphic uterus. Care then needs to be taken to correctly identify which uterus contains the pregnancy so than the corresponding cervix is measured.



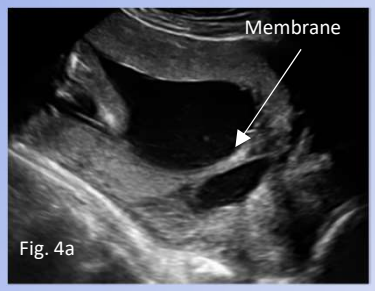
Polyps:
Fig. 2 shows a feeder vessel to an endocervical polyp on Colour Doppler. This was subsequently seen on speculum examination protruding through the external os.

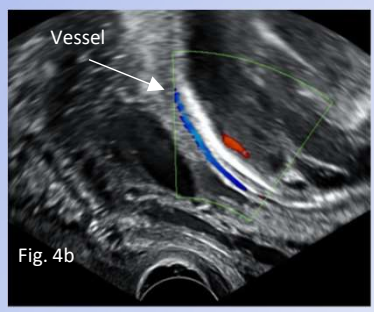


Asymmetric cervix:
Fig. 3 shows asymmetry of the anterior and posterior cervical walls this may be either an anatomical variant or a result the woman's previous LLETZ (Large Loop excision of the transformation zone).

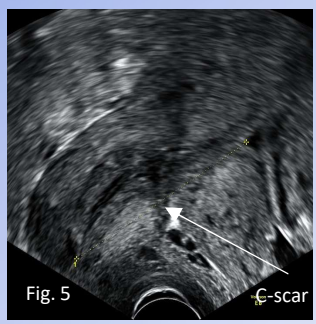


Vasa praevia:
Fig. 4a shows a trans-abdominal scan demonstrating a thick membrane connecting two lobes of placenta superior to the internal os. Fig. 4b shows a trans-vaginal images of vessels within these membranes.

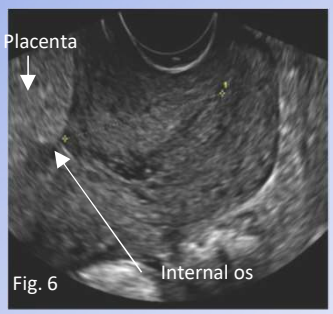




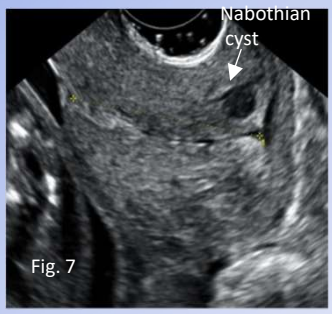
Caesarean section scar:
Fig. 5 shows an example of a Full Dilatation Caesarean Section scar within the anterior cervical wall.



Placenta praevia:
Fig. 6 shows a trans-vaginal scan which provided an opportunity to identify the placenta covering the os.



Nabothian cyst:
Fig. 7 show an example of a Nabothian cyst. These are common, of no clinical significance and should not be confused with more sinister pathology.



Conclusions:
Awareness of these unusual and unexpected cervical ultrasound appearances along with good technique will enable accurate cervical assessment and appropriate management of women.

Recommendations:
- Assess the cervix with Colour Doppler
- Scan the cervix using both trans-vaginal and trans-abdominal approach
- Don't just concentrate on measuring the cervix – look at the placenta too and remember your gynae pathology
- Always scan through the cervix in both longitudinal and transverse sections before taking any measurements