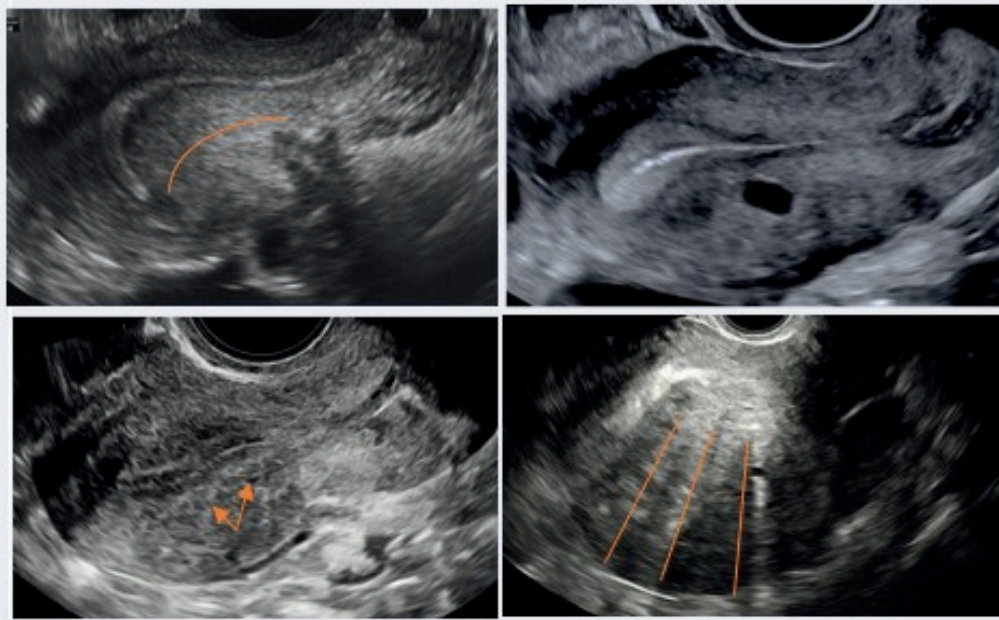

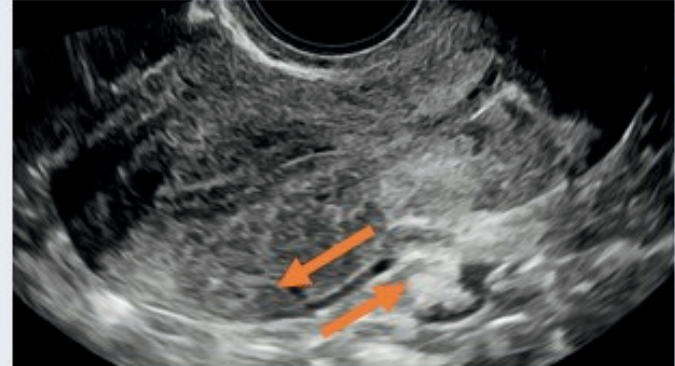
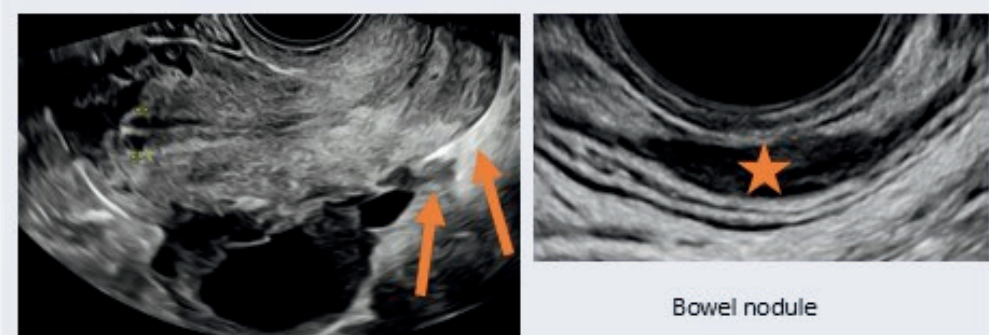


BMUS Ultrasound for Endometriosis

Endometriosis affects up to 1 in 10 people assigned female at birth and can take on average 8 years to diagnose. NICE guidelines advise an ultrasound scan to aid diagnosis. This quick visual reference guide may help guide sonographers to diagnose pelvic endometriosis.

Ultrasound Reference Guide

	Anatomy	Imaging features	Example imaging
Uterus	<ul style="list-style-type: none"> Consider uterine position within the pelvis Assessment for Adenomyosis (strongly associated with endometriosis) 	<p>An anteverted and retroflexed uterus (sometimes called the question mark sign) is a strong indicator of adhesions in the Pouch Of Douglas (POD)</p> <p>Direct ultrasound signs of adenomyosis: <i>Myometrial cysts / sub-endometrial lines or buds / hyperechogenic islands</i></p> <p>Indirect signs of adenomyosis: <i>Globular uterus / asymmetrical myometrial thickening / fan-shaped shadowing / trans-lesional vascularity / irregular or interrupted junctional zone</i></p>	
	<p>Reporting phrase suggestion: The myometrium displays the following [direct/indirect] features suggestive of adenomyosis: [insert appropriate signs]</p>		
Ovaries	<ul style="list-style-type: none"> Endometrioma Consider position of ovaries 	<p>Ground glass cysts with no Doppler flow. May be single or multiple.</p> <p>Assess position and mobility of ovaries: - Low position (POD) - Kissing ovaries posterior to uterus</p>	
	<p>Reporting phrase suggestion: There is a x mm unilocular cyst with ground glass echogenicity cyst contents, no solid component, vascularity or shadowing, suggestive of an ovarian endometrioma.</p>		
Mobility	<p>Dynamically assess the POD for mobility by gently applying pressure to the cervix with the TV probe. Observe whether the uterus glides freely from the rectosigmoid.</p>	<p>A positive sliding sign is used to describe the posterior aspect of the uterus sliding freely from the rectosigmoid.</p> <p>A negative sliding sign is used to describe the posterior aspect of the uterus not sliding freely from the rectosigmoid and/or ovaries (frozen pelvis)</p>	
	<p>Reporting phrase suggestion: + Positive sliding sign observed, the uterus was seen to move freely against the tissues in the POD - Negative sliding sign observed, this is suggestive of adhesions in the POD / posterior compartment and the pelvis may be frozen.</p>		
POD	<p>Assess the POD for evidence of fibrosis, especially when negative sliding sign is observed.</p>	<p>Fibrosis appears echogenic on ultrasound and is typically seen in the retro-cervical region (encompassing the torus uterinus and uterosacral ligaments). Within this echogenic fibrosis, you may see irregular, hypoechoic lesions which represent nodules of Deep Endometriosis (DE). You may see a bowel nodule of DE in the rectal muscularis.</p>	 <p style="text-align: right;">Bowel nodule</p>
	<p>Reporting phrase suggestion: There is evidence of retro-cervical fibrosis with x mm nodules of Deep Endometriosis in the torus / RUSL / LUSL</p>		

Red flags	Observation of the following should prompt reassessment by an experienced operator or specialist referral (dependent on local guidelines):		
	▲ Anteverted and retroflexed uterus (question mark sign)	▲ Repeated 'normal' scans with chronic pelvic pain	▲ Tender pelvis during TV examination
	▲ Ovarian endometrioma	▲ Kissing ovaries	▲ Bowel nodule
	▲ Negative uterine sliding sign	▲ Retro cervical fibrosis with dark nodules DE	▲ Adenomyosis