a healthier world through sonographer expertise

ASA Endometriosis Guidelines

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Background

Health system challenge

Endometriosis is a progressive, chronic, inflammatory condition defined by the presence of endometrial-like tissue outside the uterus.[1–8] This ectopic tissue commonly affects the ovaries, fallopian tubes, uterine surface, ligaments, and other pelvic organs, and in rare cases, may be found beyond the pelvic cavity.[1–3,6,7,9,10] The exact pathophysiology remains unclear, but current evidence suggests a multifactorial origin involving genetic, hormonal, and immunological factors.[3] Elevated levels of oestrogen and prostaglandins contribute to persistent inflammation, a hallmark of the disease, which leads to fibrosis, adhesions, and distortion of pelvic anatomy.[3,5,11,12]

Endometriosis is a highly individualised condition, with symptoms and severity varying widely.[8,13] Pain and fertility related complications are its primary clinical manifestations.[5,12] Pain may occur during ovulation, menstruation (dysmenorrhoea), intercourse (dyspareunia), bowel movements (dyschezia), and urination (dysuria), and is often accompanied by fatigue, which can significantly impact daily life and mental wellbeing.[1,3,5,7,12,14] Up to 50% of individuals with endometriosis experience infertility, and the condition is identified in 21% of patients undergoing hysterectomy.[3,5,9]

Endometriosis represents a significant health system challenge due to its high prevalence, complex clinical presentation, and substantial impact on individuals and society.[5,12,15] Despite affecting approximately one in seven Australians and one in ten New Zealanders during their reproductive years, diagnosis and management remain fragmented and inconsistent.[1–4,16–18] International evidence suggests an average delay from first symptoms to diagnosis is around 6 to 7 years, although country level averages are commonly reported in the 4-12 year range. [3,5,12,13] This diagnostic delay contributes to disease progression, chronic pain, infertility, and psychological distress, imposing a heavy burden on healthcare systems and patients alike.[3,5,12,13]

Causes of the health system challenge

Diagnostic delays: Despite its prevalence and impact, endometriosis often goes under-recognised and underdiagnosed.[5,12,13] Chronic pelvic pain is the leading reason individuals seek medical evaluation and support.[8] Contributing factors to delayed diagnosis timeframes include symptom variability, limited awareness among healthcare providers, specialist wait times, training and education levels, and the constraints of current diagnostic tools.[13] Although there is no cure for endometriosis, early detection and intervention can improve long-term outcomes, reduce symptom severity, and enhance quality of life.[1,8,13,19,20]

Workforce training gaps: Pelvic ultrasound is a key non-invasive tool in the assessment of endometriosis.[21] However, several barriers hinder its effectiveness, including insufficient scanning time, limited clinical knowledge, and a lack of specialised training among sonographers and sonologists/radiologists.[2,21–23] The need for dynamic assessments can further complicate diagnosis.[2] The shortage of sonographers trained in advanced endometriosis imaging restricts access to timely diagnosis for many individuals experiencing dysmenorrhoea and pelvic pain.[2] Many patients consult three or more health professionals and undergo multiple rounds of imaging before receiving a diagnosis, contributing to prolonged suffering and a more advanced disease state at the time of diagnosis.[1,12,24]

Economic burden: Globally, endometriosis affects up to 10% of women and people assigned female at birth during their reproductive years.[1–4,16,25–27] In Australia, this equates to approximately one in nine individuals, or 1.5 million people.[1–4,16] In New Zealand, an estimated 120,000 individuals are affected, representing around one in ten.[17] Those with a close relative diagnosed with endometriosis are 7-10 times more likely to develop the condition.[13] It can be a debilitating disease for some that brings economic burden, with an estimated annual cost of $9.6 billion in Australia, equating to around $30,000 per affected individual, due to reduced productivity and diminished quality of life.[3,5,8] Additionally, endometriosis accounts for approximately 40,500 hospitalisations annually in Australia and almost 2,000 cases in NZ (in 2022).[19,28]

Recent studies have identified a significant association between endometriosis and various obstetric complications, including ectopic pregnancy, placenta praevia, placental abruption, preeclampsia, preterm birth, fetal growth restriction (FGR), and premature rupture of membranes (PROM).[29–31] These findings highlight the importance of early diagnosis and multidisciplinary management for pregnant individuals with endometriosis, as these complications may impact both maternal and fetal outcomes.[29]

Systemic inequities: Individuals in rural and remote areas face additional barriers to accessing specialist imaging and multidisciplinary care, exacerbating health disparities.[32]

Purpose of the guidelines

This guideline is timely and appropriate for the Australian and New Zealand healthcare context. It aligns with the National Action Plan for Endometriosis[13] and responds to growing demand for evidence-based, non-invasive diagnostic strategies. By standardising ultrasound protocols and promoting advanced imaging techniques, this guideline aims to:

- Improve diagnostic accuracy and reduce delays.
- Support equitable access to high-quality care.
- Enhance multidisciplinary management and surgical planning.

Guideline development

A multidisciplinary and multi-sectoral team developed this guideline to ensure comprehensive expertise and stakeholder representation. The team included:

Clinical Experts

- Sonographers and radiologists specialising in pelvic imaging and endometriosis diagnosis.
- Gynaecologists with expertise in surgical and medical management of endometriosis.

Methodologists

- Professionals experienced in evidence synthesis and guideline development processes.

Health system representatives

- Experts in health service delivery and workforce planning to ensure alignment with national priorities.

Consumer representatives:

- Individuals with lived experience of endometriosis, nominated by patient advocacy organisations, to provide input on patient-centred care.

Stakeholder engagement

Stakeholder input was sought through:

- Consultation with professional bodies.
- Feedback rounds involving ASA members and clinicians.
- Public comment period prior to finalisation to ensure transparency and inclusivity.

Funding

This guideline was funded by the Australasian Sonographers Association.

Literature search strategy

A systematic literature review was conducted to identify evidence relevant to the diagnosis and ultrasound assessment of endometriosis. Searches were performed in OVID Discovery Index and Google scholar for peer reviewed studies published between January 2015 and November 2025. Search terms included: “endometriosis,” “ultrasound,” “transvaginal sonography,” “diagnosis,” “guideline,” “classification systems.”

In addition to peer-reviewed sources, grey literature was searched to capture relevant reports, policy documents, and consensus statements not indexed in major databases. Sources included professional society and government websites.

Inclusion criteria:

- Peer-reviewed studies, systematic reviews, meta-analyses, and consensus statements.
- Grey literature relevant to imaging protocols, diagnostic accuracy, and health system implementation.
- Studies addressing ultrasound techniques, diagnostic accuracy, staging systems, and clinical management relevant to Australian and New Zealand contexts.

Exclusion criteria:

- Non-English language publications.
- Case reports, editorials, and studies without clear methodology.

Evidence appraisal

Evidence was assessed to determine the quality and strength of recommendations. Factors considered included:

- Study design and methodological rigour.
- Consistency of findings across studies.
- Applicability to clinical practice.

Formulation of recommendations

Draft recommendations were circulated for review and refined through iterative feedback rounds until consensus was achieved. Each recommendation was linked to supporting evidence.

Consideration of benefits, harms, and cost

The guideline development team evaluated the potential benefits of early and accurate diagnosis (e.g., improved patient outcomes, reduced surgical complexity) against possible harms (e.g., increased resource use, training requirements). Cost implications, including equipment needs and workforce training, were considered to ensure recommendations were practical and sustainable within Australian and New Zealand healthcare systems.

Summary of recommendations

Table 1: Summary of recommendations.

Recommendation	Actionable step	Evidence level	Strength
Allocate sufficient time for comprehensive transvaginal ultrasound (TVUS)	Schedule 30–45 minutes for systematic assessment in suspected endometriosis cases.	High (systematic reviews, consensus statements)	Strong
Use standardised frameworks for reporting	Apply IDEA, MUSA, IOTA, UBESS, and Enzian protocols to ensure consistency and support surgical planning.	Moderate	Strong
Perform dynamic assessment (sliding sign)	Include sliding sign evaluation in all TVUS exams to detect adhesions and obliteration of the pouch of Douglas.	High	Strong
Refer complex cases to tertiary care	Patients with suspected deep endometriosis involving bowel, bladder, or ureters should be referred for multidisciplinary management.	High	Strong
Document organ mobility and lesion mapping	Report lesion size, depth, and relationship to adjacent structures using structured templates.	Moderate	Strong
Consider equity and access in implementation	Ensure culturally safe care and strategies for rural/remote populations, including telehealth and outreach services.	Expert consensus	Strong

Review

The guideline will be reviewed every 3 years or earlier if significant new evidence emerges (e.g., advances in imaging technology, updated international consensus statements). Updates will follow a transparent process involving literature review, stakeholder consultation, and expert consensus.

Implementation of these guidelines

Table 2: Barriers and enablers to implementation of guideline.

Barriers to implementation		Enablers to implementation	
Workforce shortages	Limited number of sonographers trained in advanced endometriosis imaging.	**ASA education**	Availability of webinars, workshops, and online modules to upskill sonographers.
Time constraints	Comprehensive transvaginal ultrasound (TVUS) requires extended scan and appointment times, which may be challenging in high-volume practices. Endometriosis ultrasound assessment typically requires a minimum of 30 minutes per examination, and careful consideration must be given to daily scan volumes to safeguard sonographer health and wellbeing. Prolonged and repetitive transvaginal scanning is physically strenuous and increases the risk of work-related musculoskeletal injury if appointment scheduling is not appropriately managed.	**Standardised protocols**	Adoption of frameworks such as IDEA, MUSA, IOTA, UBESS, and Enzian improves consistency and confidence in diagnosis.
Awareness	Inconsistent knowledge among clinicians regarding ultrasound-based diagnosis and staging systems.	**National Action Plan Alignment**	Align the guideline with the national action plan

Dissemination

The ASA will disseminate this guideline through its website, member newsletters, webinars, and workshops, ensuring integration into professional standards and education program.

Suggestion for monitoring and evaluation

Workplaces implementing this guideline should establish a structured monitoring and evaluation process. This includes conducting regular audits of image documention and reports to verify compliance with the guideline's recommendations. Adoption of standardised reporting templates should be tracked as part of routine quality assurance. Feedback mechanisms should be in place to gather input from sonographers, clinicians, and patients to identify barriers and opportunities for improvement. Finally, workplaces can monitor key outcome measures, such as reductions in diagnostic delays and improvements in surgical planning accuracy, to assess the impact of guideline implementation on patient care and service delivery.

Understanding endometriosis: Risk, presentation, and management

Risk Factors

Endometriosis is a complex, multifactorial condition influenced by a combination of genetic, hormonal, immunological, and environmental factors. A range of recognised risk factors have been identified that may increase the likelihood of developing the disease (Table 3).[3,12]

Table 3: Risk factors of endometriosis. Note risk factors are not diagnostic and may vary individually.

Risk factor	Definition
Obstructive Müllerian anomalies	Congenital uterine anomalies causing blockage and/or retrograde flow of menstrual outflow are associated with significant increased prevalence of endometriosis, seen in up to 47% affected individuals.[1]
Early menarche	Onset of menstruation at or before 12 years of age is linked to an increased risk due to prolonged exposure to oestrogen.[1]
Short menstrual cycles	Cycles shorter than 28 days may contribute to increased retrograde menstruation, a proposed mechanism in endometriosis development.[1]
Lower body mass index	Individuals with a lower body mass index (BMI) may be at increased risk.[1]
Nulliparity	Women who have not given birth have a higher incidence of endometriosis compared with women who have.[1]
Family history	Having a first-degree relative with endometriosis increases the risk by 7-10 times.[1]

Emerging evidence suggests that lifestyle and dietary habits may also influence the risk of developing endometriosis.[3] For instance, individuals with endometriosis tend to consume fewer vegetables, fruits (particularly citrus fruits), dairy products, and foods rich in vitamin D, and long-chain omega-3 fatty acids.[3] However, current research does not demonstrate a robust or consistent association between these factors.

Symptoms

Endometriosis presents with a wide spectrum of symptoms, and these often do not correlate with the extent or severity of disease.[3,20,33] Some patients are asymptomatic and the condition may be identified incidentally during investigations for infertility. Common symptoms are listed in Table 4. Endometriosis should be considered in individuals presenting with these symptoms, including adolescents under 17 years of age, even when symptoms are atypical or mild.

Table 4: Symptoms associated with endometriosis.

Symptom	Definition
Dysmenorrhoea (period-related pain)	Severe menstrual cramps that may radiate to the lower back and abdomen. Pain may begin before menstruation, persist for several days and even extend into the menstrual period.[3,5,7,12,34]
Chronic pelvic pain	Persistent or intermittent pain in the pelvic region, not necessarily linked to the menstrual cycle. May worsen over time. [3,5,7,12]

Mittelschmerz	Ovulation pain is often more severe or disruptive in those who have endometriosis.[35]
Deep dyspareunia (pain during intercourse)	Deep, aching pain during or after sexual intercourse. Can significantly affect intimacy and quality of life.[3,5,7,12,34]
Dysuria (painful urination)	Pain or discomfort during urination, often mistaken for urinary tract infections. May include urinary frequency and urgency.[3,5,7,12]
Dyschezia (painful bowel movements)	Pain during defecation, which can be severe and debilitating. May be accompanied by constipation or diarrhoea.[3,5,7,12]
Painful rectal bleeding	Rectal bleeding during menstruation, suggesting bowel involvement.[3,5,7,12]
Shoulder tip pain	Referred pain in the shoulder area, potentially due to diaphragmatic endometriosis.[3,5,7,12]
Cyclical scar swelling and pain	Swelling and pain in surgical scars (e.g., caesarean sections, laparoscopies) that occur cyclically.[3,5,7,12]
Fatigue	Chronic fatigue and low energy levels, often exacerbated by anaemia, pain and sleep disturbances. Can significantly impact daily function and mental wellbeing.[3,5,7,12]
Fertility related complications	Difficulty conceiving affects up to 50% of individuals with endometriosis.[3,9] Mechanisms include anatomical distortions, ovarian dysfunction, adhesions causing tubal blockage, and inflammatory changes.[1] Other complications include ectopic pregnancy, subfertility, and recurrent miscarriage.
Less Common Symptoms	
Dysesthesia and parathesia	Ipsilateral lower-limb sensory disturbance (dyesthesia and paraesthesia), suggestive of neural involvement.[36,37] Occurs when endometriotic lesions irritate or entrap pelvic nerves, including the sciatic nerve or sacral plexus.[38]
Catamenial pneumothorax	Menstrual related collapsed lung. Rare but serious condition requiring medical attention.[3,24,26]
Cyclical cough (haemoptysis)	Coughing up blood during menstruation, potentially due to thoracic endometriosis.[3,24]
Hydronephrosis and haematuria	Ureteric involvement is uncommon but when present, can cause ureteric obstruction, resulting in hydronephrosis, loss of renal function, and sometimes macroscopic haematuria.[39]

Treatment approaches to endometriosis

Management of endometriosis should be tailored to the individual's symptoms, reproductive goals, and personal preferences.[40] Treatment typically involves a combination of medical and surgical options.[3,23] This condition is strongly driven by oestrogen, and the use of oestrogen-suppressing therapies has proven effective in alleviating symptoms, improving quality of life, reducing disease progression, and preserving fertility where desired.[26,41] In some cases, patients may not pursue disease-directed medical or surgical

treatment and are managed primarily through pain control, often in collaboration with a pain specialist. These individuals may undergo regular follow-up imaging to monitor for progression of endometriotic lesions or disease.

Hormonal therapy

Hormonal treatments aim to suppress ovarian function, reduce inflammation, and induce atrophy of hormonally active endometriotic lesions.[3] Options commonly include:

- Combined oral contraceptive pill (COCP).
- Progestogens: Administered orally, via depot injection, implant, or intrauterine device (IUD).
- Gonadotropin-Releasing Hormone (GnRH) agonists and antagonists.[1,3,5,11,12]

These therapies are effective in reducing dysmenorrhea and non-menstrual pelvic pain. No single hormonal method has demonstrated clear superiority, and treatment choice should be guided by individual tolerance, side effects, and reproductive plans.[3]

Surgical management

Surgery is not curative but can be effective in removing endometriotic lesions and correcting anatomical distortions caused by adhesions and scar tissue.[3] It is particularly beneficial for individuals with deep endometriosis (DE), previously known as deep infiltrating endometriosis (DIE), endometriomas, or infertility. However, surgical excision of DE is risky, may require long operation times, prolonged recovery, and recurrence is common:

- 40-45% of individuals experience symptom recurrence after surgery. [3,42,43]
- Up to 30% require repeat surgery within five years of the initial procedure.[3,43]

Hysterectomy and oophorectomy

For individuals who have completed childbearing and have not responded to conservative treatments, hysterectomy (with or without oophorectomy) may be considered.[3] This is especially an important consideration in those individuals with co-existing adenomyosis. However, bilateral oophorectomy should be approached with caution due to its long-term consequences, including:

- Induction of surgical menopause.
- Increased risk of reduced bone density.
- Elevated risk of cardiovascular disease and cognitive decline.[3]

Subtypes of Endometriosis

Endometriosis is classified into four subtypes (noted in Table 5 and Figure 1) based on lesion location and depth of infiltration. These may occur independently or in combination, and accurate classification is essential for guiding diagnosis, treatment planning, and surgical approach.[1]

Table 5: Subtypes of Endometriosis

Subtype	Description
Superficial peritoneal disease	Lesions confined to the surface of the peritoneum, typically affecting pelvic and abdominal viscera.[1,3]
Ovarian endometriomas	Cystic lesions within the ovaries, commonly referred to as “chocolate cysts” due to their appearance at surgery.[1,3]
Deep endometriosis (DE)	DE is the most clinically significant subtype, often associated with severe symptoms and complex surgical management.[24,25] It involves endometrial-like tissue infiltrating on or beneath the peritoneum, commonly affecting the uterosacral ligaments, bladder, bowel, pelvic wall, and retroperitoneal spaces.[1,9,25]
Extra-pelvic endometriosis	Lesions located outside the pelvic cavity, including the appendix, diaphragm, abdominal wall, thoracic cavity, and, in rare cases, the brain.[3,6,24,44]

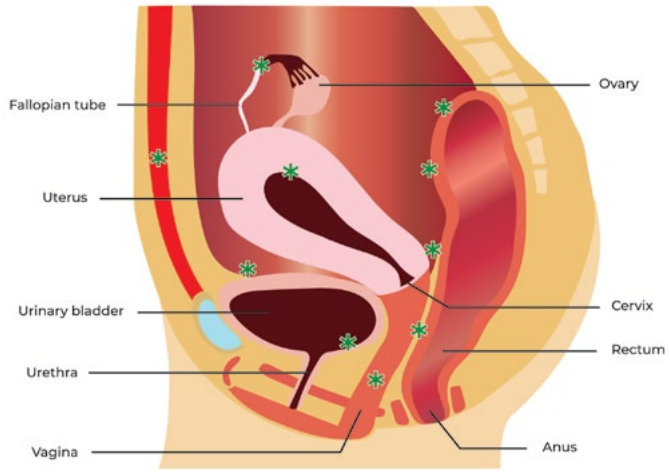


Figure 1: Overview of typical endometriosis lesion sites across pelvic and extrapelvic structures.

Ultrasound-based endometriosis staging system (UBESS)

UBESS (Figure 2) facilitates non-invasive, preoperative staging of endometriosis severity via transvaginal ultrasound, supporting efficient resource allocation, streamlined referral pathways, and enhanced multidisciplinary surgical planning.[45–47]

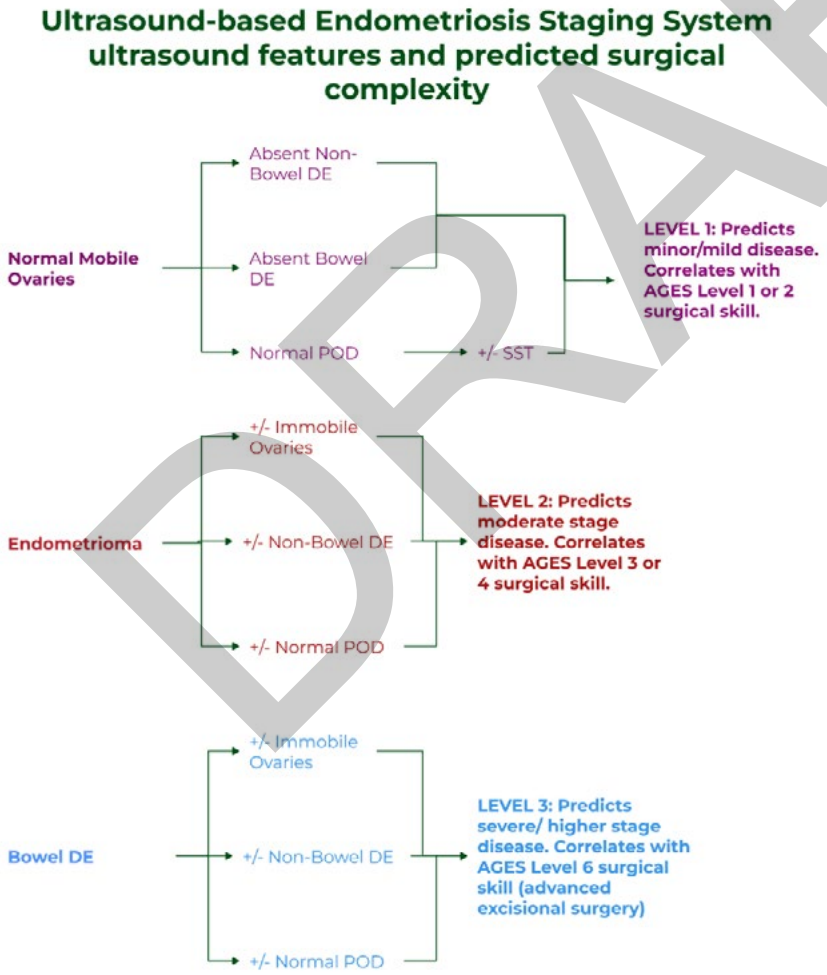


Figure 2: UBESS staging system based on sonographic features demonstrable on transvaginal ultrasound (TVS) with gel sonovaginography (SVG) and its prediction of level of surgical complexity. DE, deep endometriosis; pouch of Douglas (POD); SST, site-specific tenderness.[46]

Assessment and diagnosis of endometriosis

Historically, diagnostic laparoscopy with histological confirmation was considered the gold standard for diagnosing endometriosis.[2,3,5–7,14,22,48] While clinical diagnosis is now increasingly accepted and endorsed,[5,12,14] it is important to note that a normal physical examination or imaging result does not definitively exclude the disease.[3,5,15,24,26] Currently, no biomarkers have demonstrated adequate sensitivity or specificity for routine clinical use in diagnosing endometriosis.[3,5,8]

Individuals with severe DE should be referred to a tertiary care centre, for multidisciplinary management involving gynaecology, urology, colorectal surgery, reproductive medicine, and advanced imaging expertise.[23]

Transvaginal ultrasound (TVUS) is the preferred first-line imaging modality for evaluating gynaecological symptoms, including suspected endometriosis.[9,23,44] Targeted TVUS is internationally recommended for identifying symptom origin, mapping disease distribution, and assessing lesion extent.[2,3,9,49] This approach supports both surgical planning and patient counselling.[2,3,9,23,49] While alternative approaches may be considered, many patients who are not sexually active may still elect and consent to TVUS, as the diagnostic benefits of accurately detecting and characterising endometriosis are often perceived to outweigh potential discomfort.

In contrast, transabdominal (TA) ultrasound examination alone lacks the sensitivity required to reliably detect endometriosis.[9] TVUS has significantly improved diagnostic accuracy, particularly for detecting DE and ovarian endometriomas, with performance comparable to MRI.[2,3] In Australia, Medicare funding for MRI is limited to cases requiring surgical planning for suspected DE involving the bowel, bladder, or ureters, and when pelvic ultrasound findings are inconclusive.[3] In New Zealand, MRI is not routinely used for primary diagnosis but may be employed in secondary care settings to assess disease extent when clinically indicated.[15]

Ultrasound examination: IDEA Methodology

A systematic TVUS assessment of the uterus and adnexa is the foundational step in evaluating suspected endometriosis (Figure 3).[50] This includes identifying features of adenomyosis and assessing for ovarian endometriomas, which frequently coexist with endometriosis.[50]

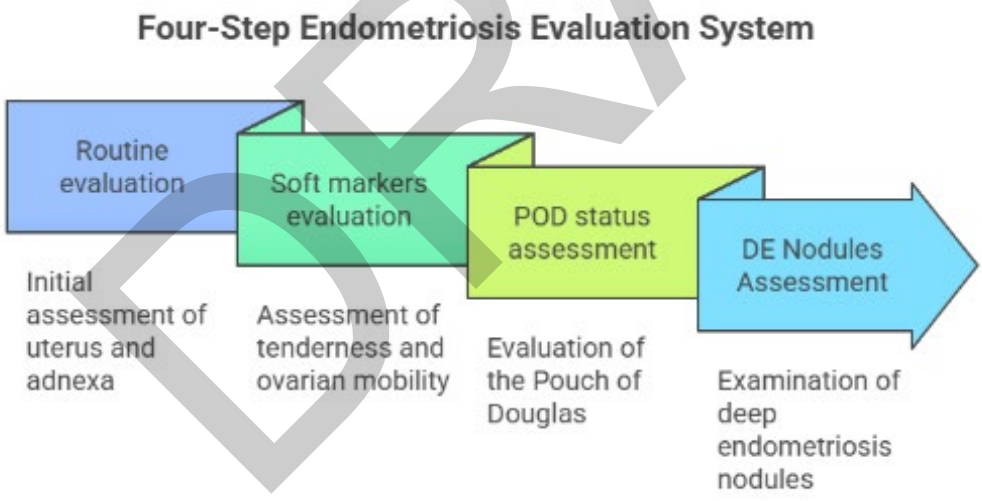


Figure 3: Steps to evaluate endometriosis

Each anatomical region should be evaluated using standardised terminology and criteria, with attention to dynamic signs such as organ mobility including the sliding sign.

Use the highest appropriate frequency transducer to optimise resolution. Enable harmonic imaging to enhance tissue contrast, and apply compound imaging to reduce speckle artefact and improve clarity.[51]

Preparation

- While there is no consensus on bowel preparation, an empty bowel may improve patient comfort and improve assessment of bowel mobility and structure.
- Allocate 30 to 45 minutes for a comprehensive TVUS examination to allow thorough history taking, adequate assessment of all relevant pelvic structures and report writing time.[9]
- Introduce yourself and ensure that the patient has received appropriate information about all aspects of the ultrasound examination.[49] The patient should be informed about the need to gently manipulate organs for dynamic assessment and consent.
- Once all aspects of the examination have been communicated and the patient has had the opportunity to ask any questions, ensure informed consent is obtained.[49]

History

A detailed clinical history is essential for guiding an effective endometriosis ultrasound examination.[3,50] Sonographers should aim to gather the following information, where appropriate, to support diagnostic accuracy and optimise patient care:

Menstrual History

☐ Age at menarche (early menarche is a known risk factor).

☐ Cycle regularity and duration.

☐ Menstrual flow characteristics (e.g., heavy, prolonged, clotting).

☐ Presence and severity of dysmenorrhoea (pain before, during, or after menstruation).

Obstetric and Fertility History

☐ Gravida and parity (G/P), including mode of delivery (e.g., vaginal, caesarean).

☐ History of infertility or difficulty conceiving.

☐ Previous pregnancies and any complications.

☐ Presence of caesarean section scars or other pelvic surgeries.

Pain Assessment

☐ Nature, location, and timing of pelvic pain (e.g., cyclical, chronic, deep dyspareunia, dyschezia, dysuria).

☐ Pain severity and impact on daily activities.

☐ History of acute pain episodes requiring emergency care or hospitalisation.

☐ Response to hormonal treatments or previous surgeries.

Gynaecological and Surgical History

☐ Previous diagnosis of ovarian cysts or endometriosis.

☐ History of pelvic surgeries (e.g., laparoscopy, excision of endometriosis).

☐ Use of hormonal therapies (e.g., COCP, progestins, Mirena, Visanne, HRT, Tamoxifen).

- Note any changes in symptoms with initiation or cessation of therapy.

Family History

☐ First-degree relatives (mother, sister) with endometriosis.

Patient positioning

- TVUS is the primary and most accurate method for assessing endometriosis, particularly DE, and should be the primary method of assessment.

- A targeted TAUS may be performed when renal tract assessment is clinically indicated, such as with Mullerian duct anomalies, when hydronephrosis is suspected, or when there is concern for ureteric involvement.
- Ask the patient to empty their bladder before the transvaginal component, as an empty or near empty bladder optimises visualisation of the pelvis and improves patient comfort.
- Position the patient with hips and knees flexed, legs separated, and the perineum aligned with the end of the examination couch.[48] This can be facilitated using a wedge cushion, stirrups, or an adjustable couch bottom section.

Uterus

A systematic assessment of the uterus should include evaluation of its size, shape, position, and sonographic features suggestive of pathology. Document the presence, size, and location of fibroids, adenomyosis, or other uterine abnormalities. Note any altered uterine position, such as retroflexion or the "question mark" configuration, which may suggest posterior adhesions or DE (Image 1). [9,49,50]

Adenomyosis Assessment (MUSA Criteria)

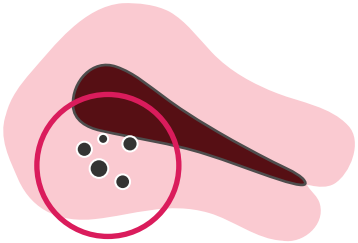
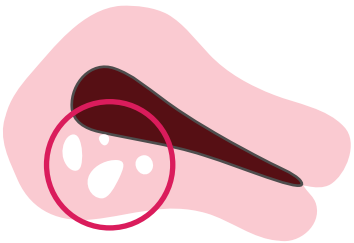
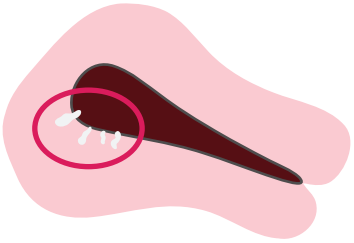
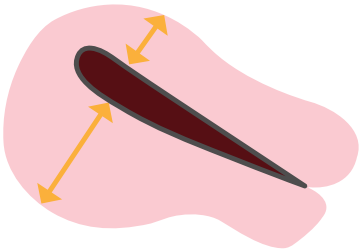
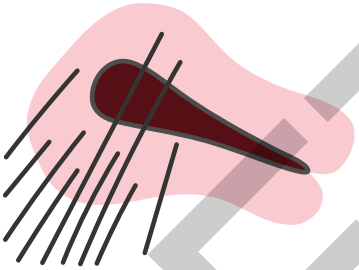
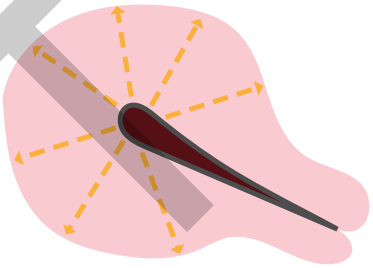
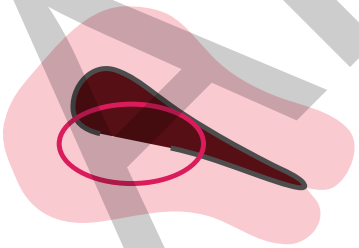
Adenomyosis is characterised by ectopic endometrial tissue within the myometrium and is highly prevalent in individuals with endometriosis, particularly those with deep disease.[49]

Direct sonographic features include: (See Table 6)
- Myometrial cysts.
- Hyperechoic islands. (Image 2)
- Echogenic subendometrial lines or buds.[9,52] (Image 3)

Indirect features include: (see Table 6)
- Globular uterine shape.
- Asymmetric myometrial thickening (often posterior). (Image 4)
- Fan-shaped shadowing. (Image 5)
- Translesional vascularity. (Image 6)
- Irregular or interrupted junctional zone.[9,52] (Image 7)

A posterior-to-anterior wall thickness ratio >1 suggests asymmetry, however there is no evidence-based cut-off to define myometrial asymmetry.[9,52] A difference of ~5 mm between anterior and posterior myometrium or a markedly uneven anterior:posterior ratio may be used only as a rule of thumb, not a diagnostic threshold.[53] Where asymmetry is the only feature present, reassess later in the examination, as transient myometrial contractions can mimic asymmetry.[1]

Table 6:

Direct signs	 Cysts	 Hyperechoic islands	 Echogenic subendometrial lines and buds
Indirect signs	 Asymmetrical thickening	 Fan shaped shadowing	 Globular uterus
	 Translesion vascularity	 Interrupted junctional zone	

Differentiating adenomyoma from fibroids

Adenomyoma, the focal form of adenomyosis, appear as ill-defined, asymmetric myometrial lesions with translesional vascularity and no mass effect on surrounding myometrial vessels.[9] In contrast, leiomyomas (fibroids) typically exhibit sharply circumscribed borders, edge-reflective shadowing, and circumferential deviation of myometrial vessels, which aids in distinguishing the two entities.[9]

Imaging enhancements

Use chroma or tint filters to enhance contrast and improve visibility of subtle lesions. Three-dimensional (3D) or four-dimensional (4D) ultrasound may aid in evaluating the junctional zone and lesion morphology, supporting differentiation from fibroids.

Ovaries

In individuals without endometriosis, the ovaries are typically located lateral to the uterus along the pelvic sidewalls.[9] In endometriosis, one or both ovaries can be displaced depending on where disease is present. Locations include posteriorly, often adjacent to the cervix or low in the posterior compartment, fundally against the uterine serosa, anteriorly, and laterally, against bowel or pelvic side walls.[9] The presence of "kissing ovaries," where both ovaries are fixed together in the midline (usually in the POD), is strongly associated with advanced disease, particularly DE involving the bowel, fallopian tubes, and uterosacral ligaments.[26,49] (Image 8 and 9) Ovarian mobility must be assessed multidirectional and be checked against

the uterus, bowel, lateral side wall, and uterosacral ligaments. Ovarian immobility can be suggestive of endometriosis, but previous surgery or pelvic inflammatory disease (PID) adhesions also cause immobility.

Ovarian Endometriomas

Ovarian endometriomas are benign cystic lesions resulting from repeated cyclical haemorrhage within ectopic endometrial tissue.[11,26,40] They are markers of disease severity and are frequently associated with chronic pelvic pain, subfertility, and complications such as ovarian torsion or cyst rupture.[11]

Typical sonographic features on TVUS include: (as per IOTA Consensus)[54]

- Unilocular or multilocular cysts. (Image 10)
- Low-level homogeneous internal echoes ("ground glass" appearance). (Image 11)
- Absence of internal vascularity. (Image 12)
- Bilaterality in up to 50% of cases.[9,24,26,41]

Endometriomas are found in up to 78% of patients with DE, with a predominance on the left ovary and more commonly in individuals under 35 years of age.[6,25,29,40] When an endometrioma is identified, a systematic assessment for pelvic adhesions, reduced organ mobility (including evaluation of the sliding sign), and associated DE, particularly involving the USL, should be performed.[23,50]

Risk stratification and malignancy

- If solid or vascularised components are present, further assessment with colour Doppler and risk stratification (e.g., IOTA or O-RADS) is recommended. Although rare, malignant transformation may occur, particularly into clear cell or endometrioid ovarian carcinomas.[9]

Clinical considerations

- Surgical excision may be required for symptom relief or to improve access to reproductive structures, but may reduce ovarian reserve, especially in bilateral cases.[29]
- Treatment planning should be individualised, balancing symptom management, fertility goals, and long-term ovarian function, often in consultation with fertility specialists.[29]
- During pregnancy, endometriomas may undergo decidualisation, mimicking malignancy on imaging. Accurate interpretation is essential to avoid unnecessary intervention.[26]
- Dynamic imaging to assess ovarian mobility is recommended; restricted mobility is a marker of DE and suggests adhesions.[9,49]
- Bilateral endometriomas are associated with more extensive disease and a higher likelihood of POD obliteration.[40] Complete POD obliteration is significantly more prevalent in patients with ovarian endometriomas, occurring in up to 21.7% of cases, compared to only 5.8% in those without ovarian involvement.[29]

Hydrosalpinx and haematosalpinx

Hydrosalpinx refers to a fluid-filled fallopian tube, typically resulting from distal tubal occlusion due to endometriosis or adhesions.[26,49] On ultrasound it appears as a tubular, anechoic or hypoechoic cystic structure separate from the ovary.[9] (Image 13 and 14)

Characteristic sonographic features include:

- Incomplete septations ("cogwheel" sign).[9]
- Focal narrowing ("waist" sign).[9]
- Endosalpingeal folds.[9]
- "Chain of cysts" appearance.[9]

Haematosalpinx is a blood-filled fallopian tube, typically appearing as a dilated tubular structure with low-level internal echoes.[9] (Image 15 and 16) While it may indicate tubal endometriosis, it is relatively uncommon and nonspecific. It may also mimic pyosalpinx, which is usually associated with infection.[9]

Clinical considerations

Hydrosalpinx and haematosalpinx are not diagnostic of endometriosis in isolation. Interpretation should be made in the context of other sonographic features, clinical symptoms and patient history. Further evaluation for endometriosis is warranted when these findings are accompanied by other sonographic features, clinical symptoms, and patient history.[9]

Posterior compartment

The posterior compartment is the most common site of DE, with up to 93% of affected individuals showing involvement in this region. [9,49] Key anatomical sites include the POD, uterosacral ligaments (USL), torus uterinus, rectovaginal septum (RVS), posterior vaginal fornix, and the bowel (especially the anterior rectum, rectosigmoid junction, and sigmoid colon).[9,26,49]

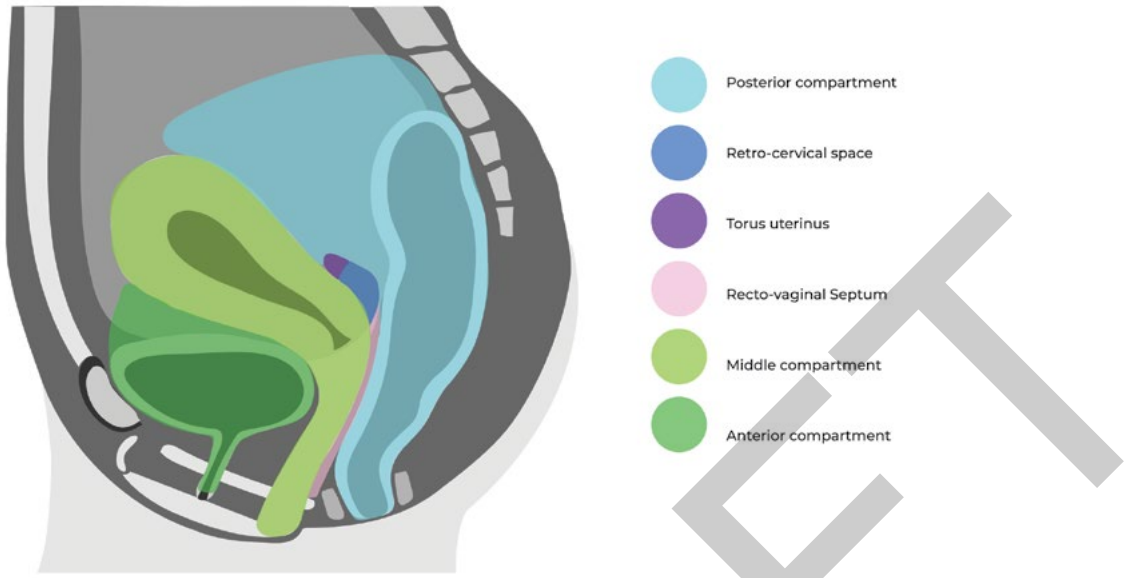


Figure 4: Anatomical compartments of the pelvis, including the anterior, middle, and posterior compartments.

Sonographic technique

- Use TVUS with the transducer placed in the posterior vaginal fornix for optimal evaluation.[9,49]
- Systematically assess the POD, USLs, RVS, torus uterinus, and bowel for lesions, thickening, distortion, or site-specific tenderness.[49]
- Evaluate for reduced organ mobility and the presence of adhesions using dynamic imaging.[49]

Pouch of Douglas

The pouch of Douglas (POD), also known as the rectouterine pouch or posterior cul-de-sac, is the most dependent peritoneal space in the female pelvis and is located between the posterior cervix and uterus anteriorly, and the anterior rectum posteriorly (see Figure 4). DE within the POD can cause significant scarring, pain, and potentially bowel/nerve issues.[1,3,15] DE lesions and adhesions can tether structures and partially or completely obliterate the POD and influence surgical planning and risk stratification.[49] Assessment of the POD is especially important when a negative sliding sign is observed.

Sliding sign

The sliding sign is a dynamic manoeuvre performed during TVUS to assess for adhesions in the POD, particularly obliteration of the POD.[9,49,50] It evaluates whether pelvic organs move freely relative to one another.

Note: POD obliteration is not specific to endometriosis. Consider prior surgery, pelvic inflammatory disease, and other causes of adhesions. Correlate with history and other sonographic findings.[55]

Sonographic technique

Before performing this manoeuvre, explain the procedure to the patient and monitor for any discomfort.[9] Document any site specific tenderness and the level of restricted movement (e.g. retrocervix, mid-uterus, and fundus).

For an anteverted uterus:

- Place the transducer in the posterior vaginal fornix.[9]
- Apply gentle pressure either with the transducer or by manual suprapubic compression with the non-scanning hand, to assess whether the anterior rectum and sigmoid colon glide independently across the posterior cervix and vaginal wall (Figure 5).[24,49,50]
- If access is limited, a cine loop may be obtained from the anterior fornix, ensuring sufficient pressure to observe movement between the uterus and the posterior compartment.[9]

For a retroverted uterus:

- Apply steep posterior transducer angulation in the posterior fornix.[9]
- Quickly release pressure to assess mobility between the cervix and adjacent retroperitoneal structures (e.g., perirectal fat or physiological fluid).[9]

Interpretation

- **Positive sliding sign**: Independent movement of the uterus/cervix and bowel structures → non-obliterated POD.[49] (Video 1 and 2)
- **Negative sliding sign**: Uterus/cervix and bowel move together → obliterated POD, suggesting adhesions and likely DE.[49] (Video 3, 4, and Image 17)
- **Restricted sliding sign**: Movement at one level of the uterus, or on one side. Indicitive of partial obliteration of POD.

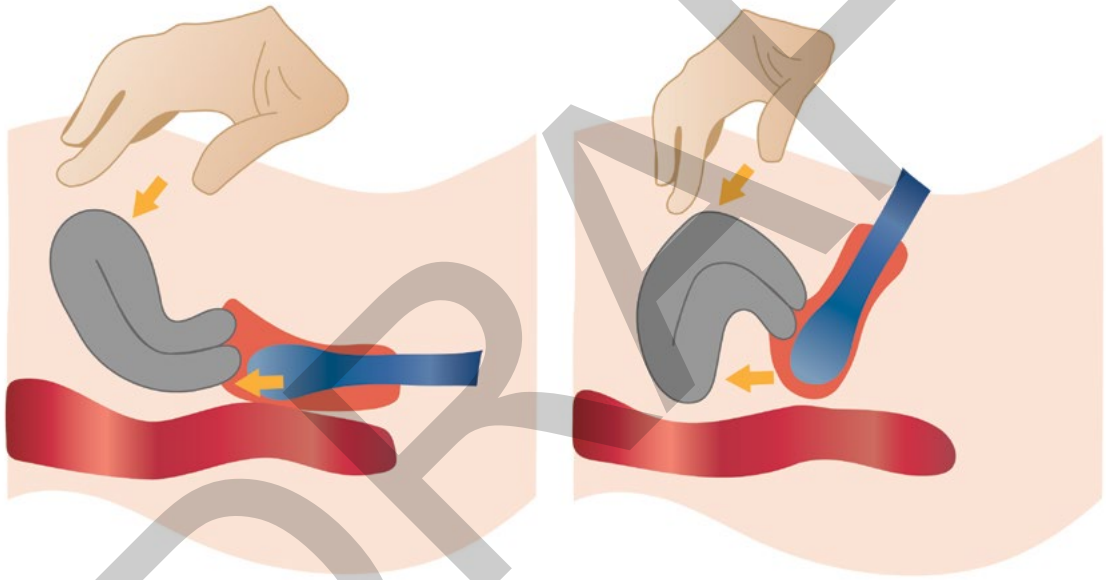


Figure 5: Demonstration of the sliding sign on transvaginal ultrasound, assessing the movement between the posterior uterine serosa and the anterior rectum to determine POD obliteration.

Uterosacral ligaments (USL)

The USLs are commonly involved in DE, with up to 73% of affected individuals showing abnormalities.[6,23] These paired fibromuscular bands extend from the cervicouterine junction (torus uterinus) posteriorly and laterally toward the sacral spine.[27,56]

- When the transducer is positioned in the posterior vaginal fornix they will lie in the near field, just beneath the vaginal wall.[9]
- They form the lateral boundaries of the POD and rectovaginal spaces and are a key site for DE assessment.[56]

Normal appearance

- Homogenous, hyperechoic, band-like structures angling anterio-laterally from the cervix.[9,49,50] (Image 18 and 19)
- Best visualised when free fluid is present in the POD and when light pressure is applied.[9,49,50]

Assessment steps

- Maintain the transducer in a sagittal plane.
- Sweep inferolaterally from the midline posterior fornix to the cervix.[49,50] (Figure 6, Video 5)
- Identify hypoechoic thickening, nodular irregularities, or distortion of surrounding peritoneal fat.[26,49,50]

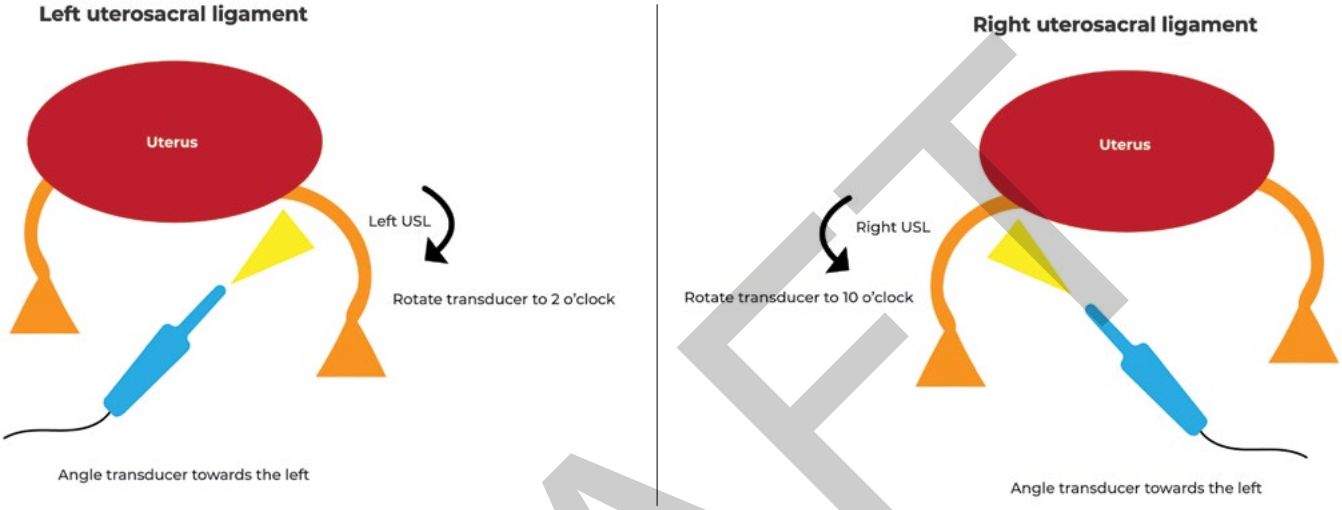


Figure 6: TVUS assessment of the USL is achieved by fanning the transducer and rotating to 2 o'clock for the right USL and 10 o'clock for the left USL.

Sonographic features

Assess during evaluation of the uterosacral ligaments by sweeping laterally from the cervix.

- Hypoechoic lesions. (Image 20)
- Irregular, star-shaped lesions. (Image 21 and 22)
- Loss of normal tissue planes. (Image 23)
- Reduced mobility with negative sliding sign.
- Site-specific tenderness.[57,58]

Torus uterinus

The torus uterinus (Figure 4) is a midline fibromuscular ridge on the posterior cervix that represents the convergence of the USL's (Image 24). Lesions at the torus uterinus are a common site of retrocervical disease, reported in up to 55% of affected individuals, and may extend laterally along the USL's.[6,9,26]

Sonographic features

- Hypoechoic lesions with variable morphology (smooth, well-defined, irregular, or spiculated).[9] (Image 25 and Video 6)
- Punctate echogenic foci.
- Absence of cystic components.
- Adjustments in transducer angle and patient positioning may improve visualisation, especially if the uterus is retroflexed.[26]
- Care should be taken to avoid inadvertent imaging of the adjacent cardinal ligament.

Associated findings

- Reduced ovarian mobility or posterior displacement.[9]
- Rectal wall distortion.[9]
- “Question mark” uterus configuration.[9]
- Consider ureteral involvement when lesions exceed 30mm.[16]

Rectovaginal septum

Rectovaginal septum (RVS) lesions are rare.[59] RVS lesions involve the fibromuscular space between the posterior vaginal wall and the anterior rectal wall, below the peritoneal reflection, and often coexists with the POD, uterosacral ligament, and rectal disease.[23] (Figure 7, Image 26 and 27)

Sonographic technique

- Identify hypoechoic lesions located between the rectum and posterior vaginal wall.[9,26]
- Lesions may be homogeneous or heterogeneous, with or without cystic components.[50] (Image 28)
- Look for loss of the hyperechoic interface between vaginal and rectal walls.[50]
- Use an imaginary line along the lower border of the posterior cervical lip to differentiate RVS lesions.[50] (Image 29)
- Consider saline or gel contrast sonography (instillation into the vaginal canal) to enhance visualisation.[26]

Clinical considerations

Mapping the extent and location of posterior compartment lesions is essential for surgical planning and multidisciplinary management. Correlation with symptoms and dynamic findings enhances diagnostic accuracy.

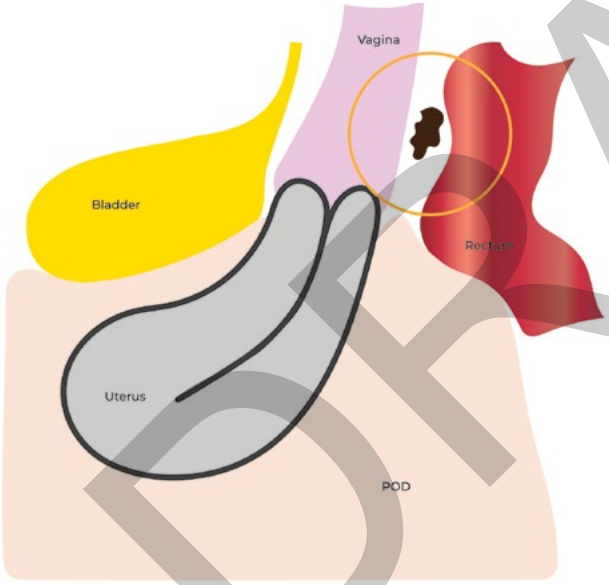


Figure 7: Rectovaginal septum (RVS) lesions arising within the fibromuscular space between the posterior vaginal wall and the anterior rectal wall.

Rectum, rectosigmoid junction, and sigmoid endometriosis

DE frequently involves the bowel, most commonly affecting the anterior rectum and rectosigmoid colon (see Figure 4).[9] Up to 93% of bowel DE cases involve these sites.[26] Lesions typically infiltrate the serosa and muscularis propria, but rarely extend to the mucosa, making them difficult to detect with colonoscopy.[9]

Normal bowel wall appearance on ultrasound

Understanding the layered structure of the bowel wall is important for identifying abnormalities:

- **Anterior rectal serosa**: thin, hyperechoic line.[50]
- **Muscularis propria**: hypoechoic, with outer longitudinal and inner circular layers separated by a faint, hyperechoic line (<3mm).[50]
- **Submucosa**: hyperechoic.[50]
- **Mucosa**: hypoechoic.[50] (Image 30 and 31)

Sonographic technique

- Use TVUS to assess the anterior rectum, rectosigmoid junction, and sigmoid colon.
- Angle the transducer towards the sacrum and apply dynamic imaging to evaluate bowel mobility and detect adhesions.[49]
- Measure the distance from the most caudal lesion to the anal verge to assist with surgical planning (Figure 8).[26,49,50]
- TVUS should be considered in adolescents when it is clinically appropriate and acceptable to the patient.[60,61] If TVUS assessment is not suitable, transrectal ultrasound can be considered as an alternative.[60,61]

Lesion characteristics

- Focal thickening of the muscularis propria.
- Hypoechoic lesions (elliptical, C shaped, or omega (Ω)shaped).[9,26,49,50] (Image 32)
- Solid lesions with comet tail or tapering extensions.[9,26,49,50]
- Parallel hyperechoic lines (Moose antler sign), indicating of submucosal involvement.[9,26,49,50]
- Lesions are generally avascular on Doppler, helping differentiate from malignancy.

Clinical considerations

- Bowel DE is often associated with involvement of the retroperitoneum, torus uterinus, or uterosacral ligaments; these areas should be carefully evaluated when bowel lesions are present.[9]
- Accurate mapping of bowel involvement is essential for multidisciplinary management and surgical planning, particularly when colorectal input may be required.

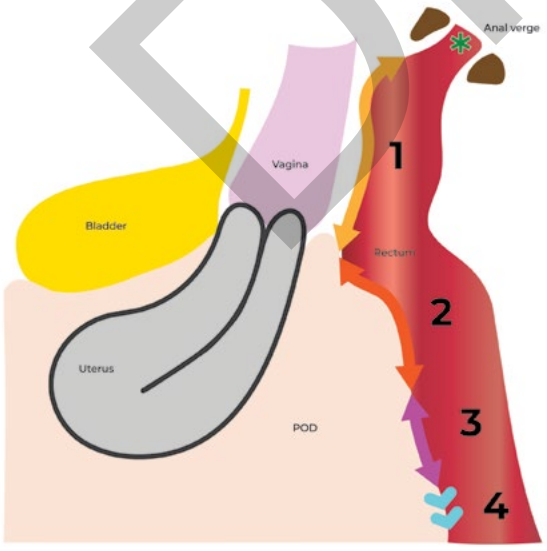


Figure 8: Anatomical diagram identifying the segments of the rectum and sigmoid colon, including the low anterior rectum (1), upper anterior rectum (2), rectosigmoid junction (3), and anterior sigmoid colon (4).

Anterior compartment

The anterior compartment includes the urinary bladder, distal ureters, vesicovaginal septum, vesicouterine pouch, and round ligaments (see Figure 4).[9,26] DE involvement of the bladder, ureters and kidneys is uncommon, affecting only 1-2% of all endometriosis cases, but may be present in up to 53% of individuals with pelvic DE when anterior compartment disease is specifically evaluated.[23,24]

Ureteric involvement is particularly important to recognise because renal tract obstruction may be asymptomatic, and a delay in diagnosis may result in progressive renal impairment or failure.[26,33,49,50] Hydronephrosis should prompt referral to a urologist, and definitive treatment usually requires surgical excision within multidisciplinary team including gynaecology and urology.[26]

Sonographic technique

- Both TVUS and TAUS may assist in assessment[1]; however, TAUS is primarily useful for renal tract evaluation, not for primary detection of bladder or ureteric DE. TVUS remains the most sensitive modality for evaluating anterior compartment disease.
- Optimal bladder assessment during TVUS is achieved with a partially filled bladder, improving visualisation of the bladder wall while avoiding excessive distension.[26,52]
- Adhesions involving the anterior myometrium may be a normal finding following caesarean section and should not be assumed to be associated with endometriosis in the absence of other supportive features.

Bladder

When assessing the bladder for DE:

- Evaluate for focal or diffuse bladder wall thickening, hypoechoic or isoechoic lesions, or plaque-like lesions, most commonly at the base or dome.[9,24,26] (Image 33)
- Lesions may be smooth, elongated, spherical or irregular in contour. In bladder deep endometriosis, they are intramural within the detrusor muscle with partial or full-thickness involvement.[26]
- Bladder lesions may be isoechoic or subtle; lesions frequently do not protrude into the lumen, making them difficult to detect on cystoscopy. This is especially true when disease is continuous with vesicouterine disease.[9]

Ureters

- Appear as hypoechoic tubular structures with rhythmic contraction and relaxation, confirming patency.[49,52]
- Examine for signs of extrinsic compression, dilatation, or obstruction; ureteric dilatation greater than 6 mm is considered significant.[49,50,62]
- Identify the ureterovesical junction (UVJ) and assess for ureteric jets using colour Doppler if required.[49]
- Measure the distance between any dilated ureteric segment and the UVJ.
- If DE is present, measure the distance between the lesion and the UVJ to assess the risk of obstruction.[49,50]
- Consider TAUS assessment of kidneys if ureteric involvement is suspected, particularly in the presence of flank pain.[63]

Uterovesical space

- Assess for signs of tethering, adhesions, or obliteration.
- Use the sliding sign to assess the mobility between the bladder and uterus.

Technique

- Place the transducer in the anterior fornix.
- Apply gentle pressure suprapubic region with the contralateral hand.[49]
- Observe whether the posterior bladder wall slides freely over the anterior uterine wall.[49,50]

Interpretation

- **Positive sliding sign**: Independent movement indicates a non-obliterated uterovesical space (Video 7).
- **Negative sliding sign**: Restricted movement indicates obliteration due to DE or prior surgical adhesions (e.g. caesarean sections).[49,50]

Superficial endometriosis

Superficial endometriosis, also referred to as peritoneal endometriosis, refers to lesions confined to the surface of the peritoneum.[51] These lesions are often subtle and difficult to detect sonographically, yet may contribute significantly to pain and infertility.

Superficial disease is present in approximately 61% of individuals with DE, and approximately 29% may have isolated superficial lesions.[4] This underscores the importance of a comprehensive ultrasound approach, even when DE is not suspected.[51]

Commonly affected sites include:

- POD.
- Pelvic sidewalls.
- USLs.
- Ovarian surfaces.[51]
- Uterine serosa. (Video 8 and Image 34)

Sonographic assessment

- Detection is challenging due to small lesion size and subtle appearance.
- Free fluid in the POD enhances visualisation by providing an acoustic window.[51]
- During TVUS, position the transducer in the posterior vaginal fornix, aligned in the midsagittal plane. Use any available fluid or ovarian follicles as acoustic windows.[51]
- If no fluid is present, sonoPODography (saline instillation into the POD) can improve lesion detection.[51]

Typical sonographic features:

- Hypoechoic areas with or without cystic spaces.
- Hyperechoic foci within cysts.
- Single or multiple lesions, sometimes forming clusters (linear or honeycomb appearance).
- Peritoneal pockets or peritoneal cysts.
- Filmy adhesions.[51]
- Loculated appearance within free fluid.

Clinical considerations

Superficial lesions may be easily missed without optimal technique and awareness. Their presence should prompt thorough evaluation of adjacent compartments, particularly in symptomatic individuals. Although less likely to cause anatomical distortion than DE, superficial endometriosis can still contribute significantly to pain and infertility.[51]

Reporting

Accurate and consistent reporting is needed for guiding clinical management, supporting surgical planning, and facilitating multidisciplinary care. Use standardised terminology and structured formats to ensure clarity and reproducibility.

Recommended reporting frameworks:

- MUSA for adenomyosis and uterine features.
- IOTA for ovarian cyst morphology, internal content, vascularity, and solid components.[49,50]
- IDEA for mapping DE and reporting size and location of lesions during a scan.
- Enzian to categorise findings into specific compartments and standardise the severity and location of disease for a structured report.[64]
- UBESS for staging and surgical planning.

Include the following in your report:

- Anatomical site involved.
- Lesion size (3 dimensions), shape, and depth of infiltration.
- Laterality and number of lesions (unifocal vs multifocal).
- Organ mobility and presence of adhesions.
- Site tenderness.
- Relationship to adjacent structures including distance to anal verge if applicable.
- Sonographic features (echogenicity, vascularity).
- Any indirect markers (e.g. obliteration of the POD, kissing ovaries).

Reports should be tailored to the clinical context, highlighting findings relevant to symptom correlation, fertility planning, or surgical intervention. Where appropriate, include measurements that assist with operative mapping.

Summary of core minimum images and cine loops

For all items, save stills plus short cine loops (3-6) seconds where specified

Uterus and Endometrium

- Longitudinal midline uterus, document uterine version, measure uterine length. Cine sweep fundus to cervix.
- Transverse uterus at fundus, mid body, cervix. Cine sweep right to left.
- Endometrium, thickness and uniformity, measure at midsagittal plane.
- Adenomyosis signs (MUSA), capture at least one representative still for any present direct sign (myometrial cysts, echogenic islands, subendometrial lines or buds) and indirect sign (globular uterus, asymmetrical wall thickening, fan-shaped shadowing, irregular or interrupted junctional zone, translesional vascularity). Add a short colour or power Doppler clip if vascularity is relevant.
- Pouch of Douglas sliding sign, dynamic clip showing posterior uterine wall sliding freely over the rectum, or a negative sign if fixed.

Ovaries and Adnexa

- Right ovary - Document size and vascularity. Record position and whether low-lying and whether “kissing ovaries”. Cine sweep through ovary, include mobility test with gentle probe pressure. If an endometrioma is present, measure three orthogonal diameters, capture contents and wall appearance, and colour Doppler if a solid components are present. Repeat for left ovary.

Anterior compartment

- Bladder base and dome, evaluate for fixed linear lesions or lesion, capture stills, plus cine sweep in sagittal and transverse planes across the trigone and base. Perform sliding sign to ensure uterovesical fold moves independently. Consider ureteric jets on TA if hydronephrosis is suspected.

Posterior compartment and rectovaginal structures

- Uterosacral ligaments and torus uterinus, targeted sweeps paramidline on each side, capture any hypoechoic lesion, measure thickness and craniocaudal extent. Short cine per side.
- Posterior vaginal fornix and rectovaginal septum, midline sagittal stills and cine to document lesion or fibrotic plate.
- Rectum and rectosigmoid, sequential sweeps from the posterior fornix up to the sigmoid, document bowel wall layer disruption and maximal wall thickness of any lesion, record distance from the anal verge where feasible. Cine of the lesion in two orthogonal planes.
- Ensure all bowel moves independently from surrounding structures.

In addition

- Document and annotate any additional regions or structures that elicit site specific tenderness.

Superficial peritoneal disease, if visualised

- Inspect peritoneal pockets for echogenic plaques or tender spots, capture representative images.

Transabdominal overview

- A targeted TAUS may be performed when renal tract assessment is clinically indicated, such as with Mullerian duct anomalies, when hydronephrosis is suspected, or when there is concern for ureteric involvement.

Example worksheet

The following example worksheet illustrates a structured approach to documenting sonographic findings in individuals with suspected endometriosis. It aligns with the IDEA, MUSA, and IOTA frameworks and supports clinical decision-making and surgical planning.

Endometriosis Ultrasound Worksheet			
Approach	TA / TV	**Verbal consent** Yes / No	
Clinical History			
G.....P.....	LMP:.....	Periods: Regular/ Irregular	Peri /Post Menopause
COCP/ Progesterone only pill/ Implanon / Mirena /HRT			
Laparoscopy	Yes / No	Date of last surgery	
Dysmenorrhoea/ Menorrhagia/ Dyspareunia/ Dyschezia/ Dysuria			
.....			
Pain on inserting transvaginal probe		Yes / No	
Uterus			
Uterus	Anteverted / Retroverted / Axial / Anteverted & Retroflexed		
Mobility	Fundus Yes / No	Anterior Yes / No	Posterior Yes / No
Tender	Yes / No		
.....			
Uterine volume.....cc			
Adenomyosis	Yes / No	Location:.....	
	Cystic / Non cystic		
	Focal / Diffuse		
	Junctional Zone / Myometrium / Outer Myometrium / Serosal		
Endometrium			
	Regular / Thickened / Distorted		
	Proliferative /Early Secretory / Secretory / Minimal / Non-specific/ Hyperplastic / Tamoxifen		
Consistent with menstrual phase		Yes / No	
IUCD position correct		Yes / No / NA	
.....			
Right Ovary / Adnexa			
NAD Yes / No			
Follicles		Size .....mm	
Mobile / Non-mobile / Partially fixed		Tender Yes / No	Corpus luteum Yes / No
Technically difficult Yes / No		IVF Access Yes / No	
.....			
Left Ovary / Adnexa			
NAD Yes / No			
Follicles		Size .....mm	
Mobile Yes / No	Tender Yes / No	Corpus luteum Yes / No	
Technically difficult Yes / No		IVF Access Yes / No	
.....			

Bladder			
NAD Yes / No			
Lesion .....mm		Mobile Yes / No	
.....			
Ureters			
Right Normal / Abnormal		**Left** Normal / Abnormal	
Dilated Yes / No		Dilated Yes / No	
.....			
Kidneys			
Right		**Left**	
NAD Yes / No		**NAD** Yes / No	
.....			
Vaginal Wall			
NAD Yes / No			
Lesion .....mm		Tender Yes / No	
.....			
POD			
NAD Yes / No		Tender Yes / No	
Patent / Obliterated		Complete / Right / Left / Midline	
Level of Obliteration Retrocervical / Mid Uterus / Fundus			
Lesion .....mm			
Uterosacral Ligaments (USL)			
Right		**Left**	
NAD Yes / No		**NAD** Yes / No	
Lesion .....mm		Lesion .....mm	
Tender Yes / No		Tender Yes / No	
.....			
Retrovaginal Septum (RVS)			
Lesion .....mm			
Tender Yes / No			
.....			
Torus Uterinus			
Right		**Left**	
NAD Yes / No		**NAD** Yes / No	
Lesion .....mm		Lesion .....mm	
Tender Yes / No		Tender Yes / No	
.....			
Bowel			
NAD Yes / No		Tender Yes / No	
Lesion .....mm		.....cm above anal verge	
Bowel Layer Muscularis / Submucosa / Mucosa			
.....			
Comments			

Summary

These ASA Endometriosis Ultrasound Guidelines provide a comprehensive, evidence-based framework to support consistent, high-quality assessment and reporting of endometriosis across Australia and Aotearoa New Zealand. By standardising sonographic technique, terminology, and documentation, these guidelines aim to reduce diagnostic delays, improve clinical decision-making, and strengthen multidisciplinary care pathways.

Ultrasound plays a critical role in the early identification, staging, and ongoing management of endometriosis. Adoption of structured approaches, such as the IDEA, MUSA, IOTA, UBESS, and Enzian frameworks, enhances diagnostic confidence, allows accurate disease mapping, and supports surgical planning. Implementation of these guidelines will also contribute to greater equity of care by promoting consistency across varied clinical settings, including rural and remote communities.

Continuous education, workforce development, and collaboration between sonographers, radiologists, gynaecologists, and other specialists remain essential to improving outcomes for individuals with endometriosis. Regular review and future updates of these guidelines will ensure they remain aligned with emerging evidence, technological advancements, and evolving clinical practice standards.

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