What is anterior compartment endometriosis?

Endometriosis is a condition where tissue of the inner lining of the womb (endometrium) is found elsewhere. Anterior compartment endometriosis is a type of deep endometriosis, which is situated in the pelvis in front of the uterus. In most cases, anterior compartment endometriosis is localized in the bladder or near the ureters.

What are the symptoms of anterior compartment endometriosis?

Women with anterior compartment endometriosis complain of pelvic pain, pain during or after sex and painful heavy periods; these are common symptoms related to endometriosis. Additionally, patients with anterior compartment endometriosis can experience presence of blood in the urine, painful urination, and other symptoms, which may also be present with urinary infections; symptoms tend to be more intense during the menstrual period.

What causes anterior compartment endometriosis?

As for other localisations, the exact cause of endometriosis is not known. Backflow of menstrual blood is considered the most likely cause of endometriosis. Other possible causes include genetic factors, immune irregularities, estrogen imbalances, and surgery (such as cesarean deliveries or abdominal surgeries).

How is diagnosed anterior compartment endometriosis?

Anterior compartment endometriosis is a chronic condition that can be particularly challenging to detect; therefore, it is mandatory to refer patients to centers with extensive experience in diagnosing and managing endometriosis.

An accurate clinical and vaginal examination is the first step for addressing the suspicion of anterior compartment endometriosis. Even if the clinical examination is normal, an ultrasonographic scan should be followed up done for checking uterus and ovaries, and other pelvic organs, like bowel and bladder.

Pelvic ultrasound scans may be helpful to show other concomitant implants of endometriosis, such as endometriomas also known as 'chocolate' cysts in the ovaries) or deep endometriosis implants between the vagina and rectum. Abdominal ultrasonography should be routinely done to rule out the presence of ureteral compression, which may be present in the case of endometriosis involving the ureters.



Are other radiological exams required (i.e., magnetic resonance imaging)?

Magnetic resonance imaging (MRI) can be done as a complement or supplement to ultrasound for evaluating patients with suspected anterior compartment endometriosis, particularly, in the case of inconclusive ultrasonographic findings. In women with suspected bladder endometriosis, cystoscopy should not be performed routinely. Specialized kidney studies (such as scintigraphy) may be considered to evaluate kidney function in selected cases of ureteral endometriosis if severe renal chronic damage is suspected.

What are the options for treatment?

Referral to dedicated centers with extensive experience in diagnosing and treating endometriosis is critical. There are several different medications to help relieve your pain. These can range from over-the-counter remedies to prescribed medications from your healthcare professional.

Hormone treatments can be adopted for treating bladder endometriosis. These treatments reduce or stop ovulation (the release of an egg from the ovary) and therefore allow the endometriosis to shrink by decreasing hormonal stimulation.

Surgical treatment of bladder endometriosis consists in the removal of endometriosis implants, which may also require a partial bladder resection. The surgical treatment of ureteral endometriosis aims to relieve ureteral obstruction, which may cause chronic renal damage. The presence of ureteral dilatation should be a strong indication of the surgical treatment, which includes conservative and radical approaches.

Overall, clinical management of patients with anterior compartment endometriosis should be undertaken at referral centres by dedicated ultrasonographers and gynecological surgeons where multidisciplinary collaboration with urologists and general surgeons can be possible.

What other questions should I ask?

- Which other diseases should be differentiated from anterior compartment endometriosis?
- Should other imaging techniques, such as CT /MRI be employed for diagnosing anterior compartment endometriosis?
- Can anterior compartment endometriosis recur?
- Does anterior compartment endometriosis impact fertility?

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