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REVIEW ARTICLE

Endometriosis: An Overview

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Abstract

Endometriosis is an enigmatic disease affecting women of all age groups but it is more commonly a disease of reproductive age group. Most commonly it affects pelvic organs and may be found in distant organs like the diaphragm, lungs, brain etc. It may severely hamper the quality of life of our women by symptoms like severe dysmenorrhea and infertility. According to a study, its diagnosis may be delayed by 8 years due to its vague and confusing overlapping symptoms with dysuria, dyschezia bloating, fatigue etc.[1]

Endometriosis is a benign chronic inflammatory disease characterized by the presence of endometrium-like glands or stroma outside the uterus. It can affect women across all ethnic backgrounds and any age group but is most commonly seen in women during their reproductive years between the age of 25 to 40 (Figure 1).

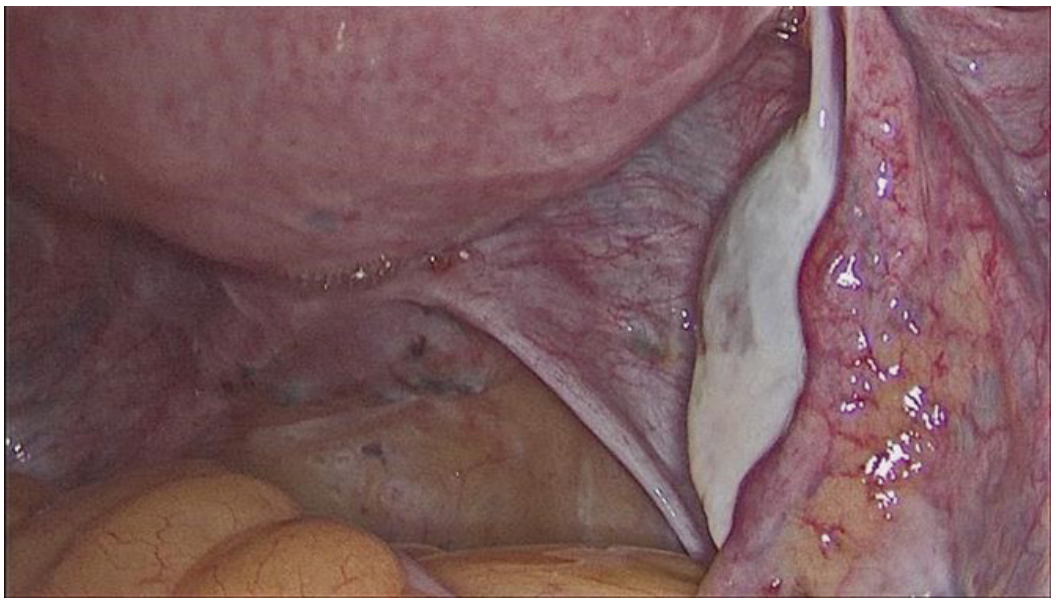

Figure 1: Superficial Endometriotic implants

Symptoms

Women can present with the following symptoms but not limited to

- Pain during, before or/and after periods.

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- Chronic pelvic pain.
- Pain during ovulation
- Low back pain during or in between periods.
- Pain during or after coitus.
- Infertility
- Painful bowel movements.
- Diarrhoea or constipation during periods
- Rectal bleed
- Bloating or nausea
- Painful urination

Types of Endometriosis

- Primary endometriosis
- Secondary endometriosis: Endometriosis following surgical procedure.

Based on the location and extent of the disease-

1. *Superficial Peritoneal Endometriosis*

The peritoneum is a thin membrane covering the pelvic and abdominal organs. The lesions can be colourless initially which becomes blue-black, described as powder burn or cigarette burn. The depth of the lesions is <5 mm (Figure 1).

2. Ovarian Endometrioma

Endometrioma are most common form of endometriosis out of the three and is easily and accurately picked up in our routine ultrasound scans. Prevalence of ovarian endometrioma is 17 to 44% of endometriosis. They can be unilateral or bilateral. They contain dark brown fluid hence commonly known as chocolate cysts. The most important aspect of the treatment of ovarian endometrioma is that it is mostly considered a marker for associated deep endometriosis disease and hence one should do excision of associated lesions as well to achieve optimal outcome and symptom relief and to prevent recurrences (Figure 2).

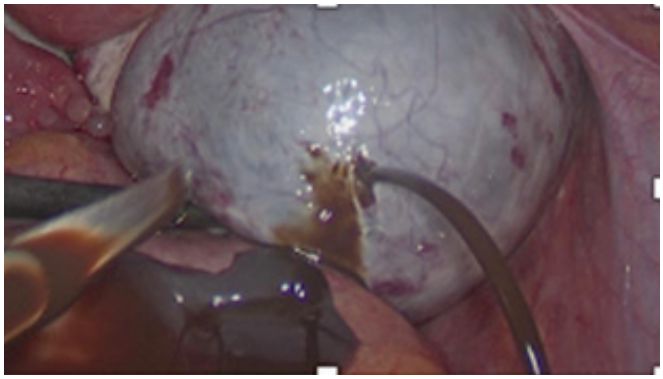

Figure 2: Ovarian Endometrioma

3. Deep infiltrating Endometriosis

Endometriosis is found in tissues and organs with lesions or nodules >5 mm, commonly associated with adhesions. These lesions can have genital or extragenital manifestations and can involve uterosacral ligaments, rectosigmoid colon, vagina, bladder, and bowel (Figure 3).

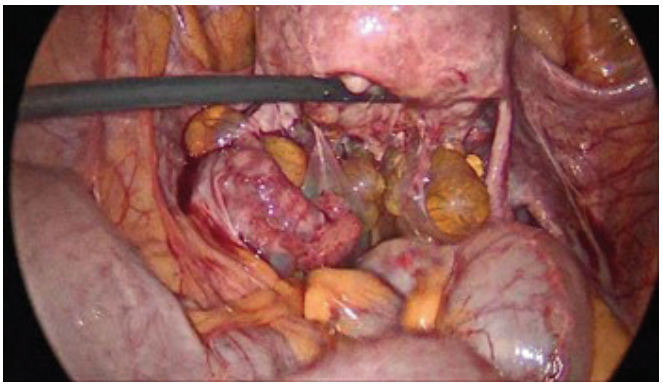

Figure 3: Stage IV endometriosis

Bladder Endometriosis

Endometriosis involving the bladder is rare. In deep endometriosis of the bladder, the lesion involves the detrusor muscle. The invasion of the endometriotic lesion is from outside to inside *i.e.*, from serosa to mucosa. Women with deep infiltrating endometriosis of bladder can present with increased frequency of micturition, urinary incontinence, burning and painful urination, and haematuria (Figure 4).

Complete excision of the lesion is the definitive treatment.

Ureteral endometriosis

Ureteral endometriosis is rare and silent which can be unilateral or bilateral. It can be extrinsic or intrinsic. Extrinsic ureteral endometriosis is more common and is extension of the lesion in the surrounding tissues. Intrinsic ureteral endometriosis is a lesion involving the muscular layer of the ureter. It is difficult to diagnose due to its silent and non-specific presentation. It can cause uretero hydronephrosis and even loss of kidney if not well managed.

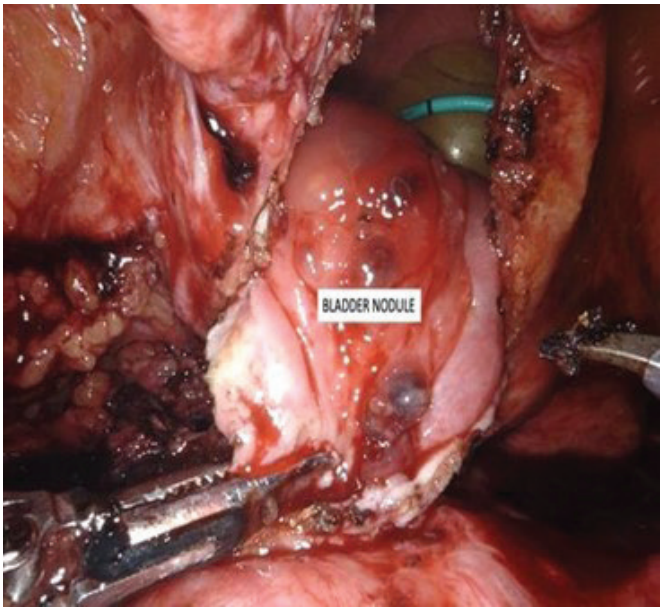

Figure 4: Bladder Endometriosis

Bowel Endometriosis

Bowel endometriosis can be superficial or deep. The lesion invades from outside to inside with involvement of serosa in superficial disease and involvement of muscularis in deep disease. It affects both large and small intestines with rectal involvement being more common. The women can present with symptoms similar to IBS leading to a delay in correct diagnosis (Figure 5)..

DIAGNOSIS

Detailed history taking and clinical examination USG and/or MRI.

Classification Systems

Various classification systems have been proposed but currently four classification systems are used to describe endometriosis (Figure 6).

- The revised American Society for Reproductive Medicine (rASRM) classification
- #ENZIAN classification (Figure 7)
- Endometriosis fertility index (EFI) and
- American Association of Gynecological Laparoscopists (AAGL) classification.

No classification system is perfect and out of all ENZIAN classifications is the one that includes all deep infiltrating lesions as well.[2]

#Enzian P_, O_/_, T _/_, A _, B_/_, C _, F _().....
Based on the modality of assessment can be

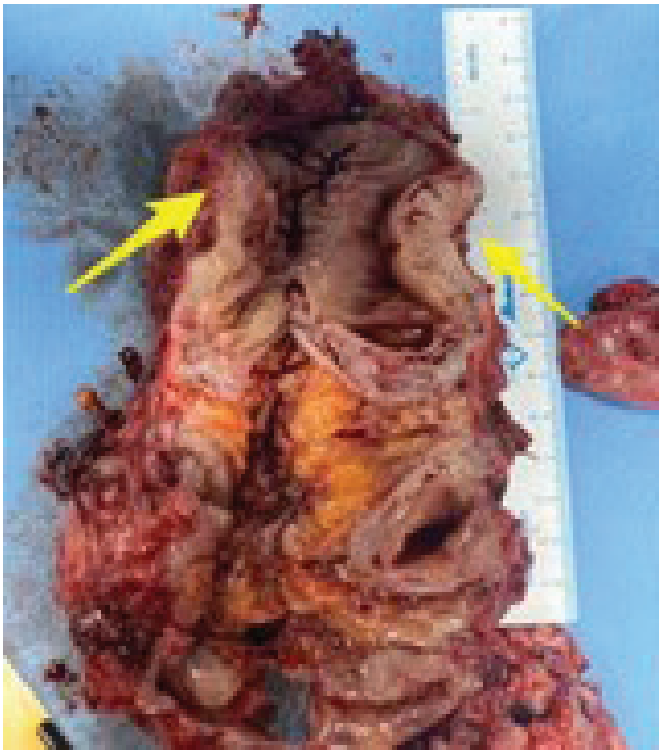

Figure 5: Bowel Endometriosis

represented as**:** #Enzian (u) assessment by ultrasound
#Enzian (m) assessment by MRI
#Enzian (s) assessment by surgery[3]

Management

Pain and infertility are the two main symptoms that need to be addressed in endometriosis (Figures 7 and 8). Pain management depends upon the symptoms and presence of any organ dysfunction. [4]

Infertility Management depends on the stage of endometriosis and associated symptoms.
Management of Ovarian Endometriosis
Available Treatment options are-

- OCP'S
- Progestins
- Surgery

Medical Management: Endometrioma responds poorly to medical treatment. The only role of medical treatment is to reduce endometriosis-associated pain. It can be used as a strategy to prevent /delay recurrence post-surgery.

There is no role No role of medical treatment in

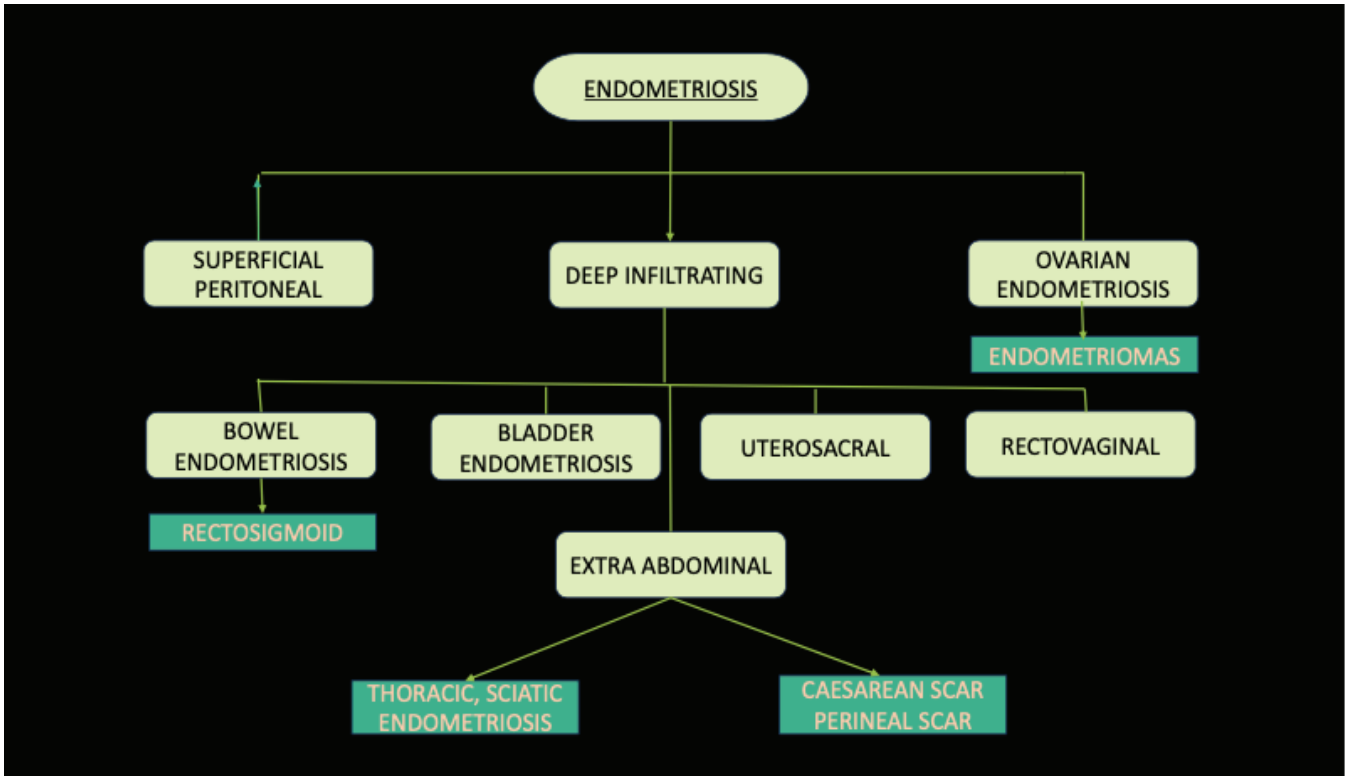

Figure 6: Classification of Endometriosis.

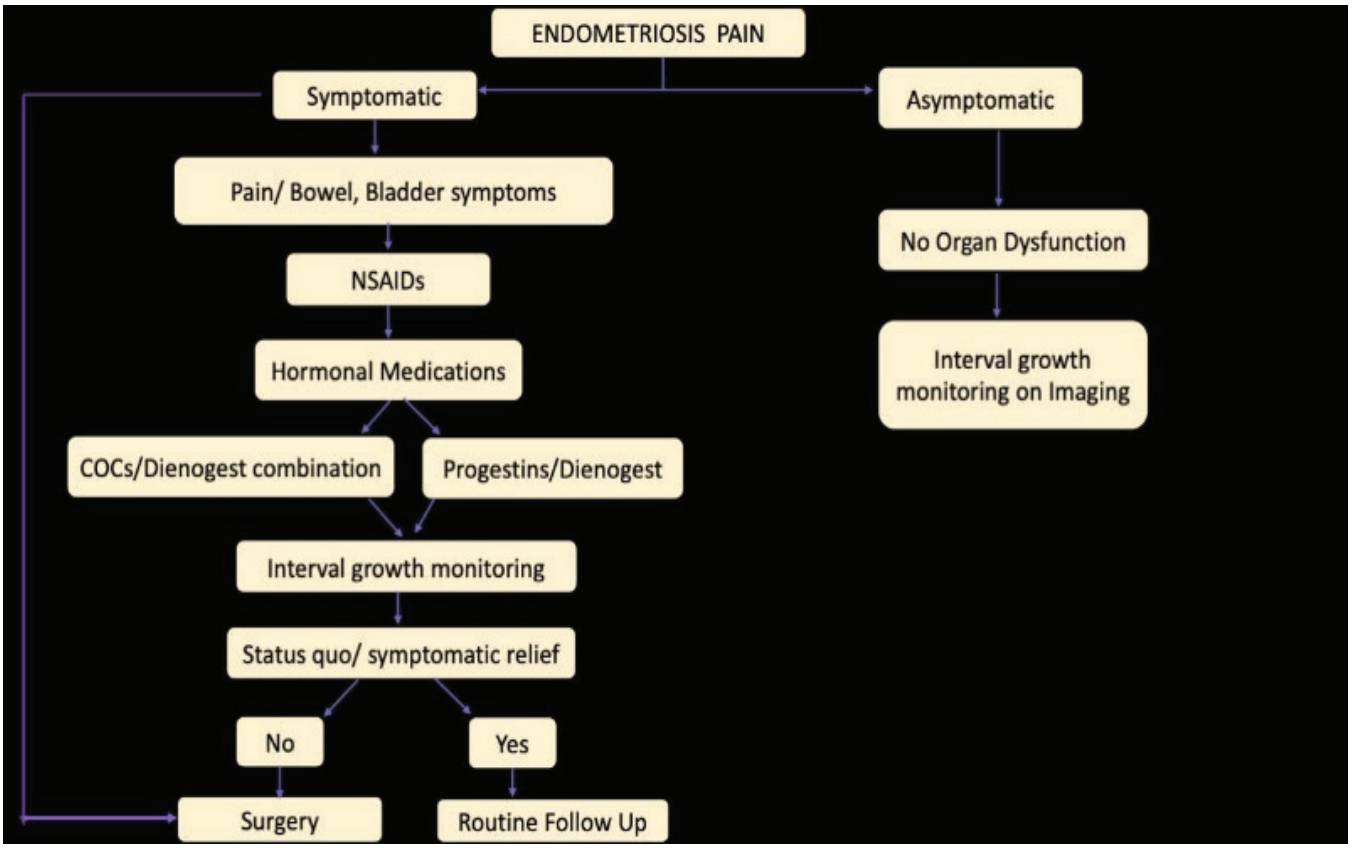

Figure 7: Endometriosis Pain classification.

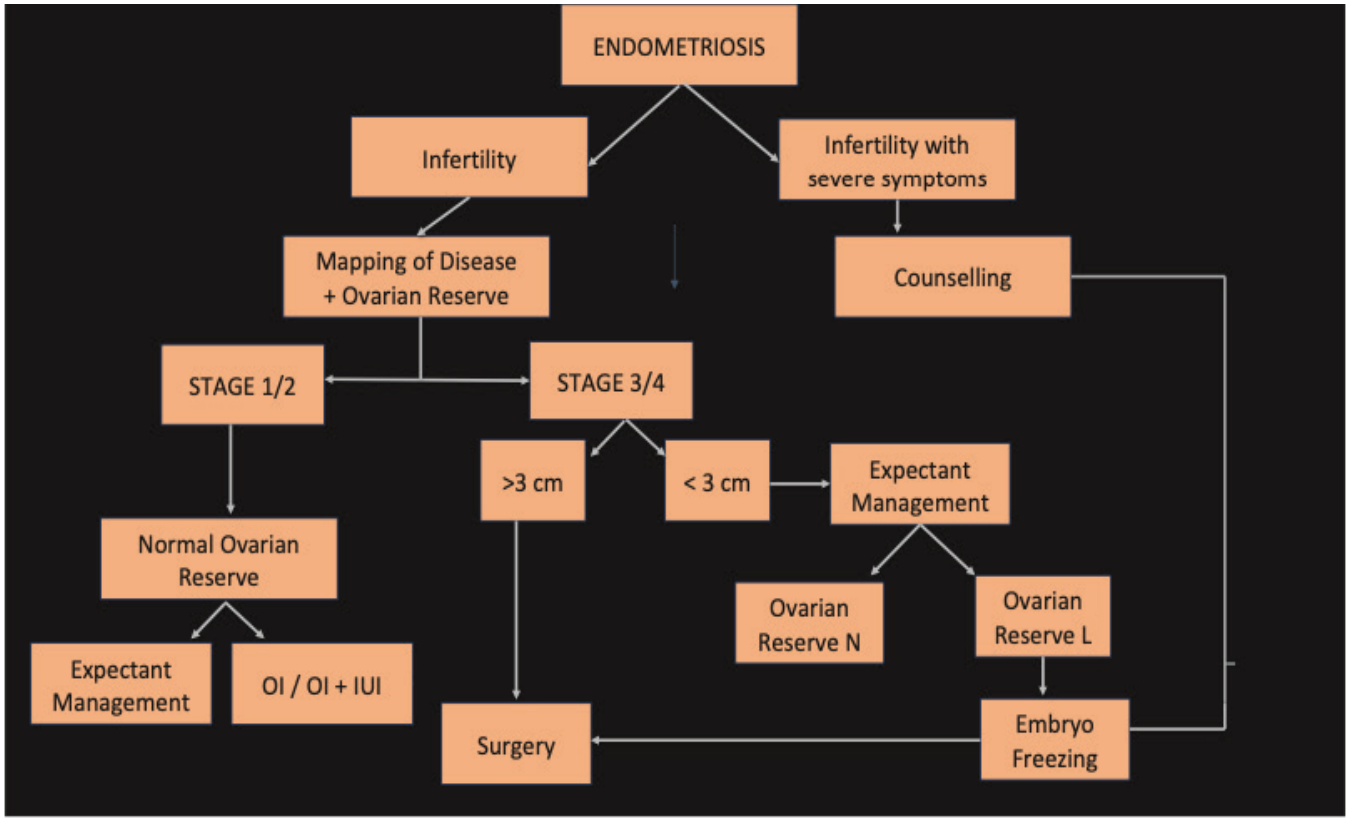

Figure 8: Infertility management.

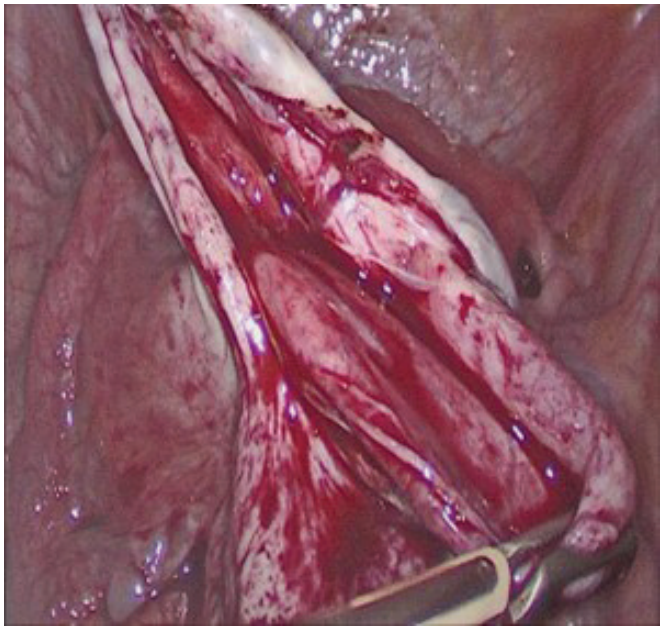

Figure 9: Ovarian Cystectomy

infertility patients with endometrioma.[5]

Surgical Treatment is definitive:[6] Options available in surgical treatments are-

- Cystectomy /enucleation/excision (Figure 9).
- Drainage and electrocoagulation
- Drainage with laser ablation/plasma
- Sclerotherapy

Excision surgery is the mainstay treatment than ablation treatment.

Ablative treatment does less damage to ovarian reserve but it has more chances of recurrences.

Management of Bowel Endometriosis[7]

If the patient is symptomatic, and muscularis is involved then definitive treatment is either disc excision or segmental resection.

If only serosal involvement is detected, shaving of the superficial lesion is an adequate treatment.

If the patient does not show any bowel symptoms, and less than 50% circumference of bowel involved can be kept on interval growth assessment and expectant management.

References

1. Han XT, Guo HY, Kong DL, Han JS, Zhang LF. [Analysis of characteristics and influence factors of diagnostic delay of endometriosis]. Zhonghua Fu Chan Ke Za Zhi. 2018 Feb 25;53(2):92-98.

2. Johnson NP, Hummelshoj L, Adamson GD, Keckstein J, Taylor HS, Abrao MS, Bush D, Kiesel L, Tamimi R, Sharpe-Timms KL *et al*. World Endometriosis Society consensus on the classification of endometriosis. *Hum Reprod* 2017;32: 315-324.
3. Haas D, Oppelt P, Shebl O, Shamiyeh A, Schimetta W, Mayer R. Enzian classification: does it correlate with clinical symptoms and the rASRM score? *Acta Obstet Gynecol Scand* 2013;92: 562-566.
4. Review on endometriosis surgery Philippe R. Koninckx, Anastasia Ussia, Jörg Keckstein, Mario Malzoni8, Leila Adamyan, Arnaud Wattiez, Gynecol Pelvic Med 2021;4:38.
5. Clinical Diagnosis and Early Medical Management for Endometriosis: Consensus from Asian Expert Group Mee-Ran Kim, Charles Chapron et al. Healthcare 2022.
6. Recommendations for the surgical treatment of endometriosis-part 1: ovarian endometrioma, Working group of ESGE, ESHRE, and WES;Ertan Saridogan, Christian M Becker, Hum Reprod Open. 2017; 2017(4).
7. Recommendations for the surgical treatment of endometriosis. Part 2: deep endometriosis, Working group of ESGE, ESHRE, and WES, Joerg Keckstein. Human Reproduction Open, pp. 1–25, 2020.