

## CLINICAL GUIDELINES FOR FAMILY PHYSICIANS

## Management of Endometriosis

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Endometriosis occurs in approximately 8% of reproductive-age women and can have severe consequences, including chronic pelvic pain and infertility. It occurs in approximately one-third of infertile women and up to 87% of women with chronic pelvic pain.

**Clinical Manifestations**

Pelvic pain is a common complaint in the outpatient office. Symptoms of endometriosis include dysmenorrhea, cyclic chronic pelvic pain, and dyspareunia that is worse during menses.

**Diagnosis**

Frequently, there are no abnormalities on physical exam that would indicate endometriosis, and labs typically are normal. It is important to consider other diagnoses, including irritable bowel syndrome, interstitial cystitis, and tubal scarring secondary to pelvic inflammatory disease.

Consideration can be given to obtaining a CBC, urinalysis, and gonococcal and chlamydia testing. Pelvic imaging is of limited use but can be considered as part of the initial work-up. If there is an adnexal mass on palpation, imaging studies are accurate in differentiating an endometrioma from other masses. Ultrasound is best utilized in determining the presence of an endometrioma on the ovary in a fertility work-up, rather than as an initial diagnostic tool of endometriosis.

The only definitive way to diagnose endometriosis is through laparoscopy and a histologic examination. Visual examination with laparoscopy or surgery can be helpful, but studies have shown discrepancies between visual assessment and histologic findings. The importance of laparoscopy to diagnose endometriosis has been debated in the literature, with investigators weighing the impression and risks of surgery against the importance of a precise diagnosis when treating with medications.

**Medical Treatment**

When a woman presents to the office with symptoms consistent with endometriosis, the initial plan should be control of pain and preservation of future fertility. There is no need to verify the diagnosis of endometriosis with imaging or surgery prior to starting therapy.

The first-line therapy in a woman in whom a clinical diagnosis has been made and who has mild symptoms is NSAIDs. If NSAIDs are not sufficient to control pain, then the next line of therapy is oral contraceptives. If the patient is having pain with the withdrawal bleed associated with OCs, then continuous OCs may be beneficial. There is evidence that continuous therapy can provide a significant reduction in pain after a woman has failed cyclic OC therapy.

If first-line treatment with NSAIDs and OCs fails, consider laparoscopic surgery to confirm a diagnosis of endometriosis. An alternative approach includes more empiric therapy or attempting other medical therapies.

Gonadotropin-releasing hormone (GnRH) analogues are effective in reducing dysmenorrhea. But they are no more effective than OCs, and have greater associated side effects, including hot flashes, vaginal dryness, and osteopenia.

When relief of pain supports ongoing therapy, the addition of progestins as add-back therapy decreases bone density loss and side effect–related symptoms without compromising symptomatic efficacy. Add-back therapy can be started concurrently with the GnRH analogues. It should be noted that the Food and Drug Administration has approved GnRH agonist therapy for a 12-month course only.

Depo medroxyprogesterone acetate (DMPA) is also

effective suppressive therapy, though it's less preferred by women looking to become pregnant soon, as there may be a long delay until return to ovulation. It also can be used for a limited time only, and has the side effect of osteopenia.

The levonorgestrel IUD is effective in reducing pain associated with endometriosis, and it has shown persistent benefit at 3 years. The IUD is no better or worse than the GnRH analogues; however, many women discontinue use of the IUD because of weight gain, irregular bleeding, or pain. The IUD does not have FDA approval for the treatment of endometriosis.

Androgens such as danazol are effective treatment but have undesirable side effects, including acne, hirsutism, and myalgias. Therefore, they are not recommended as a first-line therapy.

**Surgical Treatment**

While surgery may need to be considered in patients with severe pain that is unresponsive to medical treatment, it is not a first-line therapy. Surgery is also considered as the choice of therapy when a woman is suffering from endometriosis-induced infertility and is attempting to conceive.

Such infertility is thought to be due to the presence of an endometrioma on the ovary. Because the endometrioma can invade the ovary, it must be explained to the patient that removing an endometrioma may remove ovarian tissue. There is evidence that an excision of the endometrioma will give a better pregnancy rate than a simple ablation of the cyst, as an endometrioma is likely to reform after an ablation. Although the data do show that there is an improvement in pregnancy rates after surgery, the extent of benefit is not as clear.

**Bottom Line**

Endometriosis is a common gynecologic condition affecting women of childbearing age. It can be diagnosed in the office on an outpatient basis and often responds to simple medical treatment. First-line therapy is NSAIDs and oral contraceptives. The oral contraceptives can be given as a continuous therapy. If the patient fails conservative medical management, then one can choose to perform a laparoscopy or try further medical management. Surgery may be considered when a woman has endometriosis-induced infertility.

Management of pain and control of symptoms will benefit patients by increasing quality of life and preserving future fertility.

**Reference:**

► Management of Endometriosis: ACOG Practice Bulletin (Obstet. Gynecol. 2010;116:223-36).



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## Transurethral Bulking Agent Response Greater

BY MIRIAM E. TUCKER

FROM THE ANNUAL MEETING OF THE AAGL

LAS VEGAS – Although women who had more severe stress urinary incontinence were more likely to require repeat injections, they were also more likely to respond to transurethral bulking agent injection therapy, results of a retrospective study of 124 cases showed.

“Clinical and urodynamic parameters may help predict treatment response and the likelihood of retreatment, such that patients with indicators of more severe incontinence have a significantly better treatment response, although they may require repeat injections to achieve this result,” said Dr. Deborah R. Karp of the Cleveland Clinic Florida in Weston, who presented the results at the meeting.

The patients all underwent transurethral bulking with Uroplasty's Macroplastique (MPQ) between July 2007 and September 2009. They had a mean age of 74 years and a mean body mass index of 28 kg/m<sup>2</sup>. Two-thirds had undergone previous anti-incontinence surgery, and 15% had previously received a different bulking agent.

A self-report incontinence severity scale was used, in which 0 was complete continence, 1 indicated one or two incontinent episodes per day, 2 indicated three or four episodes per day, and 3 indicated more than five episodes per day. Treatment response (defined as a decrease by at least 1 point on the incontinence severity score) was reported by 61% (76) of the women, whereas the other 39% (48) reported treatment failure (defined as either no change or an increase in the score).

Of the 76 responders, 66% (50) were treated with a single injection, whereas the rest (26) required multiple injections to achieve a response. The strongest variable associated with a positive treatment response was previous anterior colporrhaphy (odds ratio, 2.8). Other significant predictors included a maximum urethral closure pressure (MUCP) of less than or equal to 40 cm H<sub>2</sub>O (OR, 2.6), clinical reporting of mixed incontinence (OR, 2.4), use of three or more pads per day (OR, 2.1), five or more incontinent episodes per day (OR, 2.1), or a first leak of less than 50 mL on cystometrograms (OR, 2.0).

Factors found not to be associated with treatment response included urethral hypermobility, Valsalva leak point pressure (VLPP), previous sling, and the volume of MPQ injected, Dr. Karp reported.

A secondary analysis examined the combined group of 26 responders and 16 nonresponders who received repeat injections. Variables associated with the need for repeat treatment included indicators of more severe incontinence, including leak point pressure of 60 cm H<sub>2</sub>O or lower (OR, 7.3), history of urethrolysis (OR, 6.2), low MUCP (OR, 3.5), VLPP of 60 cm H<sub>2</sub>O or lower (OR, 3.5), five or more incontinent episodes per day (OR, 3.0), and a positive empty supine test (OR, 2.7).

Dr. Karp stated that she had no disclosures. The study's principal investigator, Dr. G. Willy Davila, is a consultant for and has received honoraria from Astellas Pharma US, Watson Pharmaceuticals, American Medical Systems, Novasys Medical, and CL Medical. He has also received research funding from American Medical Systems and Astellas Pharma US. He does not have a financial relationship with Uroplasty. ■