Use Histology to Confirm Endometriosis Diagnosis

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San Diego — When it comes to diagnosing endometriosis, visual inspection is not enough, Dr. Georgine Lamvu said at the annual meeting of the International Pelvic Pain Society.

"We need to be more careful to use excisional biopsies during laparoscopies and careful about the thorough evaluation of the pelvic structures, to record these so we can keep track of the infiltration, size, and distribution of the lesions," said Dr. Lamvu of the department of obstetrics and gynecology at the Florida Hospital, Orlando.

She went on to note that not all endometriosis causes chronic pelvic pain. In one study of 15 patients with presumed endometriosis who went on to have conscious laparoscopic pain mapping, endometriotic lesions reproduced pain in 7 patients, all of whom had histologic confirmation of the diagnosis. Endometriotic lesions did not reproduce pain in eight cases.

"Seven of nine cases with histologically confirmed endometriosis mapped their pain to endometriotic lesions but none of the six cases in which the visual diagnosis of endometriosis was not histologically confirmed mapped their pain to 'endometriotic' lesions," she said. "So although it's very important to confirm [the diagnosis with] histology, we should not always assume that because you have pathology you'll have pain."

Level A evidence suggests that endometriosis is associated with chronic pelvic pain in 50%-70% of patients. "This still does not answer the question: Is endometriosis the source of their pain?" Dr. Lamvu said. "Eighty percent of women with chronic pelvic pain also end up being diagnosed with endometriosis at some point. That does not mean that the endometriosis is the source of pain."

Other potential causes of pelvic pain to rule out include urinary sources such as interstitial cystitis, gastrointestinal sources such as irritable bowel syndrome, and musculoskeletal trigger points.

"It's important to explain to patients with chronic pelvic pain that they may have symptomatic endometriosis or that they may have been misdiagnosed with endometriosis," she said. "It's also important to explain to them that endometriosis can be inadequately treated and can exacerbate pain from other sources."

The pathophysiology of endometriosis remains unclear but one concept developed in 1949 called the composite theory has gained the attention of researchers in recent years.

This theory suggests that a variety of immunologic and genetic factors may mediate endometriosis, including direct extension into myometrium and adjacent organs, exfoliation of viable endometrial cells through tubes, and implantation of these cells into the peritoneum and adjacent organs.

"There [are] a lot of convincing data that retrograde menstruation and implantation of endometrial fragments are the primary mode of developing endometriosis in the peritoneal cavity, but it's definitely not the only process," Dr. Lamvu said. "Research is now focusing on mechanisms that are involved in the attachment and the clearance of viable endometrium from the pelvic cavity. So the focus has come to alterations in the immune system."

Current treatment for endometriosis associated with pelvic pain includes observation with palliative treatment with NSAIDs, hormonal suppression with continuous oral contraceptives, and gonadotropin-releasing hormone agonists (GnRH), excision, ablation, or cystectomy, and definitive extirpating surgery such as hysterectomy or bilateral salpingo-oophorectomy.

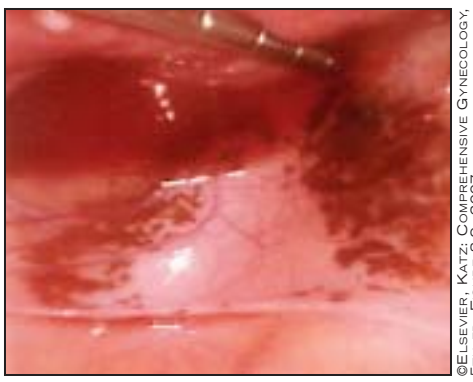
"A lot of us are now doing a combination of medical and surgical therapies," Dr. Lamvu said.

Which surgical technique is best for managing endometriosis remains unclear. "There have been no comparison trials," she said. "Some experts suspect that excision may be more effective for pain management in deep lesions, but for the general population of gynecologists superficial ablation with some type of medical therapy afterwards will be less risky."

She added that pain improvement in the postoperative period "may be best for patients who have extensive disease. There may be some correlation between the extent of disease and response to treatment."

Pain usually recurs within a year in 40% of patients who undergo surgical therapy and within 1-2 years in 30%-40% of patients who receive medical therapy.

"This is a frustration for all of us," said Dr. Lamvu, who is also assistant director of the Florida Hospital Family Practice Residency program. "There is no telling whether these numbers will [improve] now that we are incorporating so many different therapies for the management of pain."



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Endometriosis seen laparoscopically needs to be histologically confirmed.

Future therapies include selective progesterone receptor modulators such as asoprisnil, which induce amenorrhea without side effects of hypoestrogenism and control uterine prostaglandins. Doses of 5, 10, or 25 mg per day may be effective in reducing pelvic pain.

The progesterone antagonist RU486 (mifepristone) also holds promise. A dose of 50 mg every day for 6 months may lead to a decrease in the number of endometriotic lesions.

"These are experimental therapies," Dr. Lamvu emphasized. "They may not work for some patients. Most of these therapies are recommended for only 3-6 months."

Other future therapies include selective nonsteroidal aromatase inhibitors such as anastrozole and letrozole.

"The nice thing about these is that they're heavily studied in other disease processes such as cancer, so we have a lot more data as far as long-term side-effect profile and safety profile," she said. "In pelvic pain these have only been studied for up to 6 months."

Dr. Lamvu said she is most optimistic about the potential for new GnRH antagonists to make a significant improvement in chronic pelvic pain associated with endometriosis.

These agents "may work faster and have fewer side effects than the GnRH agonists that we now use," she said. ■