Pelvic Disease

Decoding Pelvic Pain

A simple, quick, noninvasive method —a cotton-tipped applicator test—can help clinicians reliably detect central sensitization and cutaneous allodynia in patients with continuous pelvic pain, say researchers from the University of Calgary, Calgary, Alberta, Canada.

The American Congress of Obstetricians and Gynecologists has estimated that 15% to 20% of women aged 18 to 50 years have experienced chronic pelvic pain (CPP) of some type. But the causes can be complex, making it difficult to distinguish the source in many patients. In this study, the researchers explored the viability of 3 bedside tests in discriminating visceral disease from nonvisceral disease among women with CPP.

The researchers separated participants into 3 groups: 22 women with continuous CPP of ≥ 6 months' duration, not controlled with standard treatment; 12 with cyclic pelvic pain of ≥ 6 months' duration, not controlled with standard treatment; and 23 women with no pelvic pain. Two clinicians performed the tests, done during the 5th to 10th days of the participant's menstrual cycle to avoid possible variation in pain sensitivity across different stages of the cycle.

The clinician gently passed a cotton-tipped applicator (CTA) down from the midclavicular line under the ribs on each side of the abdomen to the supra pubic area. The clinician then moved the CTA across the abdomen in the region of the T10-L1 dermatomes. Patients were instructed to report the appearance of pain by giving signals to the clinician. The test was considered positive if the sensation suddenly changed to a sharp pain despite gentle pressure. The patients scored their pain on a visual analog scale, and the test was repeated.

The CTA test was able to discriminate continuous CPP cases from the pain-free controls with 73% sensitivity and 100% specificity. The test also discriminated to a lesser extent between continuous CPP cases and cyclic pain controls. It showed 98% agreement between the 2 raters. Only 1 participant in the continuous pain group tested positive by 1 clinician and negative by the other.

The CTA test seemed to have a greater likelihood of identifying cutaneous allodynia in women with a visceral source of pain, compared with a somatic source of pain. Patients with a history of preexisting or concurrent visceral disease had a higher rate of cutaneous allodynia. The researchers note that the value of the test seems to be that, when positive, it can indicate the presence of a current or previous visceral disease; when negative, it can provide some reassurance the pain may not be due to central sensitization and that central sensitization has not yet developed in response to an internal visceral disease.

Perhaps more important, the researchers say that the test can help reassure the woman that her pain is being taken seriously. Many CPP patients, they say, interpret a physician's report of a normal test as a statement that her anatomy is normal and that the pain must be in her mind. The CTA test, the researchers suggest, can be a screening method to validate the patient's concerns and to possibly avoid the expense and discomfort of repeating evaluations.

Source: Nasr-Esfahani M, Jarrell J. *Am J Obstet Gynecol.* 2013;208(1):52.e1-e5.
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