SAVANNAH, GA. — Even women who have no symptoms of postpartum fecal incontinence can show subtle signs of pudendal nerve injury, Thomas Gregory, M.D., reported in a poster at the annual meeting of the American Association of Electrodiagnostic Medicine.

“There can be detectable evidence of nerve injury in asymptomatic women after a vaginal delivery, and there is evidence of even more injury in women who do have some bowel incontinence post partum,” commented Dr. Gregory of Oregon Health and Science University, Portland.

Because symptoms of fecal incontinence may not manifest for years, the influence of nerve injury sustained in childbirth is unclear. Previous studies have relied on pudendal nerve terminal motor latency, but this test is abnormal only when the largest, most heavily myelinated nerves are damaged; it does not detect subtle injury.

Needle electromyography (EMG) is a better way to assess this, but the test is difficult to perform on anal sphincter muscles, because these muscles are always contracted to maintain continence. However, a computer program using multi-modality data from the test may measure important quantitative parameters in these constantly contracted muscles.

Dr. Gregory obtained readings on 71 women (of whom 28 were nulliparous and 43 were primiparous).

Of the primiparous women, 23 were asymptomatic at 12 weeks post partum, and 20 reported some level of fecal incontinence by 26-40 weeks post partum. All primiparous subjects had vaginally delivered single cephalic fetuses with a mean birth weight of 3.495 kg; the mean length of second-stage labor was 75 minutes. There was one operative vaginal delivery in the asymptomatic group, and there were three in the symptomatic group.

Documented at birth were two anal sphincter lacerations in the asymptomatic group and fecal incontinence by 26 weeks in the symptomatic group.

All women underwent an ultrasound examination of the anal sphincter. Pudendal nerve terminal motor latency (PNTML) was also assessed. Then, each woman underwent concentric needle EMG of the external anal sphincter; PNTML was not different among the three groups.

Three of the symptomatic women showed evidence of either permanent (noted originally at birth) or occult (not seen originally at birth) sphincter disruption on ultrasound. None of these women were continent to solid stool.

However, significant differences were seen between the primiparous and the nulliparous subjects in the motor-unit action potentials recorded by EMG.

Both primiparous groups showed increased duration, amplitude, turns, and phase angles compared to the nulliparous group. These are signs of denervation/reinnervation and indicative of nerve injury. The injuries were probably caused by the compression and stretching of the pudendal nerve during childbirth, Dr. Gregory said.

The symptomatic women showed higher readings in all parameters than the asymptomatic women, indicating that they had experienced a more severe injury.

New Drug for Overactive Bladder Lacks Cognitive Side Effects

At the meeting Dr. Lipton presented a Novartis-sponsored randomized controlled trial of darifenacin that focused on the drug’s cognitive impact rather than on clinical efficacy, which has already been established in numerous clinical trials totaling more than 10,000 subjects.

He reported on 129 subjects aged 65-84 years who participated in a randomized, double-blind, placebo-controlled cross-over study in which they received 2-week courses of one of four regimens: darifenacin at 3.75, 7.5, or 15 mg once daily, or placebo.

The primary study end points consisted of scores on a battery of cognitive function tests assessing memory scanning, speed-of-choice reaction time, and delayed word recognition sensitivity.

There was no change from baseline in mean scores on any of the cognitive tests over the course of 14 days of darifenacin at any of the studied dosages. Nor were any treatment-related adverse events noted.

The most common darifenacin-related adverse events were mild and relatively non-treatment-limiting constipation and dry mouth, each of which was reported in 4%-12% of patients on various dosages.

There were no ECG abnormalities, which can occur with blockade of the muscarinic M2 receptor.