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OBSTETRICAL ANAL SPHINCTER INJURY RATE, ASSOCIATED PELVIC FLOOR DISORDERS AND SEXUAL LIFE

Hypothesis / aims of study

In 2005-2008, the obstetrical anal sphincter injury (OASIS) rate at our department was 0.5%, which was below expected and published incidence rate. Therefore, we provided extensive theoretical and practical education in pelvic floor anatomy, anal sphincter anatomy, standardised classification of the injury and proper techniques of suture and management of OASIS both to the doctors and midwifes. On animal model, proper suturing techniques were practiced. Each patient diagnosed with OASIS is followed-up at urogynecological unit to assess the wound healing and to diagnose and solve possible complications, such as incontinence (faecal or urinary) and dyspareunia.

Study design, materials and methods

This is a retrospective analysis of patients diagnosed with OASIS and dispensed in our urogynecological unit.

During the examination, we asked whether the patient had problems with urinary or faecal incontinence or had pain during intercourse. 4D perineal ultrasound at three month control was done to determine whether avulsion of the levator ani was present using tomographic criteria. Sexual activity was addressed by question about having intercourse since the delivery and if positive answer was received whether the patient felt pain or any other discomfort during the intercourse.

Results

The patients have been followed since 2009, in total 124 patients were referred to the unit – 27 patients delivered in 2009, 35 patients in 2010, 29 patients in 2011 and 33 patients in 2012. Dropout rate in years 2009-2011 was 6.6% (6 out 91). In 2012, the dropout is seven patients, but five of them are scheduled for the three month control at the end of March 2013. Total number of vaginal deliveries at the department within period 2009-2012 was 11722 births, with 160 forceps deliveries and 116 vacuum extractions.

Average parity in the group of patients with OASIS was 1.11 (range 1 – 2), average BMI 22.7 (range 17.6 – 36.5), average height 168.1cm (range 156 – 184), average maternal weight 64.2kg (range 45 – 103) and average neonatal weight 3563g (range 2300 – 4830).

The overall incidence of OASIS in 11722 vaginal births is 1.06 %. The incidence rate of OASIS associated with forceps delivery reached 14.38 % (overall incidence of forceps 1.36 %) and in the vacuum extraction group reached 6.9 % (overall incidence of vacuum extraction 0.99 %).
54 patients (43.5 %) had avulsion of the levator ani muscle. Bilateral avulsion occurred in 18.5 %, avulsion on the left side in 15.3 % and avulsion on the right side in 9.7 %.

At three month control, 31 patients (25 %) admitted pain or other difficulties during intercourse, 48 patients (38.7 %) did not report any difficulties and 32 patients (25.8 %) did not have intercourse since the delivery. The dyspareunia might be influenced by the pelvic floor injury. To exclude this concern we analysed the association with levator ani avulsion injury.

	With avulsion of levator ani muscle	Without avulsion of levator ani muscle	Total
Sexual impairment	17	14	31
Without sexual impairment	23	25	48
Sexually passive	13	19	32

Using Fisher's exact tests we did not find statistical significant (p less than 0.05) difference between groups of patients based on levator ani injury.

Interpretation of results

The incidence of OASIS in 2012 at our department is 1.17 % after extensive education and tutoring for four years. This is at a lower range of reported OASIS incidence, but in our unit it means increased reporting of OASIS by more than 100 %. There is high incidence (42.5 %) of levator avulsion in group of patients with OASIS which could be explained by enormous forces dilating levator hiatus. The incidence of dyspareunia after OASIS seems to be high, but the levator avulsion is not the reason for it.

Concluding message

More than one quarter of women with OASIS remains sexually passive for more than three months from delivery. Dyspareunia in women with OASIS is not caused by the levator avulsion. Incidence of reported OASIS increases with better training.

Disclosures

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