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PELVIC FLOOR SYMPTOMS FOLLOWING OBSTETRIC ANAL SPHINCTER INJURY (OASIS) – AN 8 YEAR ANALYSIS OF A DEDICATED CLINIC IN A TERTIARY REFERRAL CENTRE

Hypothesis / aims of study

Obstetric anal sphincter injury (OASIS) occurs during vaginal delivery when perineal tears extend into the anal sphincter complex, involving the internal and external anal sphincter muscles, or the rectal mucosa itself. OASIS is a leading cause of bowel symptoms in young women. The Royal College of Obstetricians and Gynaecologists (RCOG) reported back in 2007(1) that the overall incidence of OASIS was 1% however the most recent literature suggests that in the UK the rate has tripled from 1.8% to 5.9% between 2000 and 2012(2). Of women who have sustained an OASIS, 60-80% is asymptomatic at twelve months following primary repair however some women continue to have symptoms such as faecal urgency, and/or flatal/faecal incontinence as well as urinary and sexual symptoms. The overall incidence of bowel symptoms varies from 25% to 67% at ten years following OASIS. 53% of women following OASIS develop anal incontinence compared to 19% following an uncomplicated vaginal delivery (3). Because of the inconsistency in the reported incidence of bowel dysfunction following OASIS it is difficult to identify the relevant prognostic factors and therefore provide women with accurate prognosis following primary repair. The aim of this study is to determine the incidence as well as the obstetric variables associated with the long-term prevalence of pelvic floor symptoms following primary repair of OASIS.

Study design, materials and methods

Between January 2015 and March 2015 all women (n=462) who attended the dedicated OASIS clinic at a large teaching hospital between June 2008 and February 2012 were sent a stamped addressed postal questionnaire.

A specific questionnaire was designed for the study and included questions regarding satisfaction with attendance to the clinic, decision about further pregnancies and deliveries as well as outcome of initial management of pelvic floor symptoms. The validated St Mark's incontinence and Thompson scores as well as questions regarding sexual and urinary symptoms were incorporated onto the questionnaire.

Information regarding obstetric history, initial pelvic floor symptoms as well as clinical diagnosis of OASIS via endoanal ultrasound (EAUS) and the assessment of impaired function by anorectal physiology (AP) was available from their first attendance to the clinic.

The respondents were subcategorised onto two groups, those who had received conservative management to the initial pelvic floor symptoms to those who hadn't. The collected data was assessed using Excel and StatsDirect software.

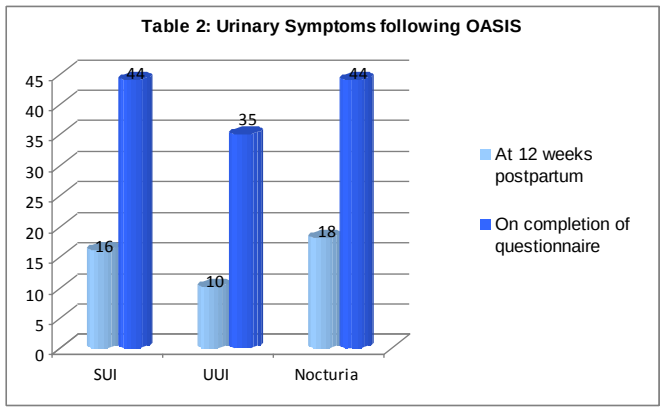
Results

These preliminary results include respondents up to the 1st of April 2015. 97 (21%) questionnaires were returned. 25 (5%) were returned uncompleted as the participant no longer lived at that address and 72 (15.5%) were returned completed.

Table 1 shows the descriptive summary of the respondents. Table 2 shows the urinary symptoms following primary repair (initial attendance to the dedicated clinic) and on completion of the questionnaire. 59 (82%) reported being sexually active with 10 (13%) stating that bladder and bowel symptoms interfere with sexual activity, 18 (25%) experiencing discomfort since primary repair and 8 (11%) reporting an overall decrease in enjoyment during sexual activity since primary repair.

There was a statistically significant difference on the St Marks and Thompson scores from initial attendance to the dedicated OASIS clinic to completion of the questionnaire. The median initial St Marks incontinence score of 0 and on completion of the questionnaire of 2 (p=0.001). The median Thompson score initially was 0 and on completion of questionnaire was 1 (p=0.002).

Table 1: Descriptive characteristics of the participants. Values are given as mean (SD) or number (percentage).	
Characteristics n=72	Value
Age (y)	32 (8.55)
Height	164 (20.3)
Weight	65 (12.3)
Length of second stage (mins)	80 (84)
Foetal weight (kg)	3.7 (1)
Foetal head circumference (cm)	35 (4)
Primiparous	46 (63.3%)
Multiparous	55 (76.6%)
Mediolateral episiotomy	32 (44.4%)
Forceps delivery	23 (32%)
Vacuum delivery	5 (6.9%)
Epidural	33 (45.8%)
Ethnicity	
Caucasian	42 (58%)
Afrocaribean	8 (11%)
Asian	7 (9.7%)
Indian	6 (8.3%)
Bangladeshi	2 (2.7%)
Other	4 (5.5%)



46 (63%) were offered conservative management for initial management of pelvic floor symptoms. The St Marks incontinence score and Thompson score in those that had no treatment was p=0.04 and p=0.25 and in those that had treatment was p=0.06 and p=0.5 respectively. There is a statistically significant deterioration in urinary stress and urge incontinence (p<0.0001) for both groups. Overall there has been an improvement in the reported sexual activity (p=0.003).

Interpretation of results

The preliminary data for this study show that appears to be a deterioration of bladder and bowel symptoms for all women irrespective of initial conservative management of pelvic floor dysfunction following OASIS.

The study is ongoing so with an increased number of respondents we will correlate deterioration of symptoms amongst the ones that have primary repair in 2008 with the ones in 2012 as well as the degree of the injury and impaired anal function with ongoing pelvic floor symptoms. There is also not enough numbers to predict ongoing pelvic floor symptoms if pre-existing bladder and bowel symptoms.

Concluding message

Although this is preliminary data with small number of participants it is important to highlight the overall deterioration of anal and urinary incontinence as well as constipation in all patients following primary repair of OASIS over an eight year period.

References

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Disclosures

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