DEFAECATORY DIFFICULTIES FOLLOWING CLINICALLY SUSPECTED OBSTETRIC ANAL SPHINCTER INJURY.

Hypothesis / aims of study
The incidence of faecal incontinence following obstetric anal sphincter injury (OASIS) has been widely studied. However the incidence of difficult defaecation has not. Two variables predicted constipation at 12 months post-partum: a lower BMI and constipation in the first trimester. Parturition not only affects the anal sphincter complex but also the ancillary muscles of the pelvis leading to interference of the normal anatomy of the levator ani and other muscle groups within the pelvic floor. This disruption in anatomy (causing rectoceles, perineal descent and rectal intussusceptions) is thought to lead to defaecatory difficulties. Vaginal delivery is associated with a higher incidence of rectovaginal septal defects and rectoceles. There was an association between rectovaginal septal defects and a history of constipation and straining. This study aims to identify the incidence of defaecatory difficulties following a clinically suspected third degree tear.

Study design, materials and methods
A review of prospective clinical data of 208 women between June 2008 and February 2010 was carried out to identify the incidence of defaecatory difficulties in patients with ancillary muscle damage in women with a clinical diagnosis of third or fourth degree tears and evacuatory difficulties.

Women with a clinically suspected third degree tear or symptoms of anal incontinence were referred and followed up in a dedicated third degree tear clinic three months after delivery. Clinical history and Anal Endosonography (AES) was performed to assess sphincter injury.

The clinical history recorded included questions on: constipation, straining, difficulty evacuating, sensation of incomplete evacuation and anal digitation. A standardised questionnaire was also carried out which asked specific questions related to symptoms of faecal incontinence or constipation so that we could statistically calculate the exact symptoms with the type of tear or ancillary muscle damage to see if there are associations. Patients were asked if their bowel function was normal pre pregnancy.

Results
206 women with a suspected third degree tear were reviewed in the dedicated third degree tear clinic.

Anal endosonography
148 of 206 (72%) had EAS and 56(27%) had IAS and EAS damage. 56 women had no anal sphincter injury identified on AES.

Symptoms
Of the 206 women, 32 (16%) suffered from difficulty in evacuation post-partum. Symptoms included: Constipation 41 (20%), straining 49 (24%), sensation of incomplete evacuation 35 (17%), and anal digitations 5 (2%).

AES and symptoms
Of the 148 women with a confirmed OASIS on AES, 123 (83%) had no defaecatory problems pre partum, 21 (17%) suffered from constipation, 13 (11%) difficulty evacuating, 22 (18%) straining, 18 (15%) complained of a sensation of incomplete evacuation and 4 (3%) needed to anally digitate to aid evacuation of the rectum. Of the 25 with defaecatory symptoms pre partum only 6 had no defaecatory symptoms post-partum. 19 women had symptoms both pre and post-partum. Post-partum a total of 32 (22%) had constipation, 26 (18%) had difficulty in evacuation, 37 (25%) suffered from straining, 26 (18%) suffered from a sensation of incomplete evacuation and 4 (3%) needed anal digitate to aid evacuation of the rectum.

Of the 56 women with both an internal and external anal sphincter injury 45 (80%) had normal bowels pre partum, of these women 9 (20%) suffered from constipation, 6 (13%) from difficulty evacuating, 10 (22%) from straining, 9 (20%) from sensation of incomplete evacuation and 4 (9%) from anal digitations. Post-partum of the 11 women with defaecatory symptoms 3 had no defaecatory symptoms post-partum. 8 women had defaecatory symptoms pre and post-partum. Post-partum a total of 15 (27%) had constipation, 12 (21%) had difficulty in evacuation, 7 (30%) suffered from straining, 12 (21%) suffered from sensation of incomplete evacuation and 4 (7%) needed to anal digitate to aid evacuation of the rectum.

Of the 56 women with no OASIS on AES, 48 (86%) had no defaecatory symptoms pre-partum. 8 (14%) had defaecatory symptoms pre-partum. Post-partum 5 had no defaecatory symptoms and 3 had defaecatory symptoms pre and post-partum. Post-partum 11 (19.6%) women complained of defaecatory symptoms. 7 (13%) had constipation, 5 women (9%) had difficulty in evacuation, 11 (20%) suffered from straining, 6 (11%) suffered from a sensation of incomplete evacuation and none needed to digitate to aid evacuation of the rectum.

Interpretation of results
Defaecatory difficulties may be present pre and post-partum. Defaecatory difficulty affects a quarter of women post-partum following a clinically diagnosed OASIS. The rate of defaecatory difficulties is no different in those women with and without a confirmed OASIS on AES. Damage to the ancillary muscles of the pelvic floor (puboanalis, transverse perineii and puborectalis) may be responsible for the deterioration in defaecatory symptoms. The post-partum deterioration in defaecatory difficulties may be protective in some patients with OASIS to prevent faecal incontinence symptoms.
Concluding message
Defaecatory difficulties as well as faecal incontinence symptoms can affect women following a clinically diagnosed OASIS. Further work is required to evaluated the rate of defaecatory difficulty in those with no vaginal trauma.

References

Disclosures
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