694

Schizas A[1], Igualada-Martinez P[1], Lyons M[1], Darakhshan A[1], Oteng-Ntim E[1], Williams A[1]
1. *St Thomas Hospital, London*

TRIPLE ASSESSMENT AND CONSERVATIVE MANAGEMENT FOR OBSTETRIC ANAL SPHINCTER INJURY

Hypothesis / aims of study

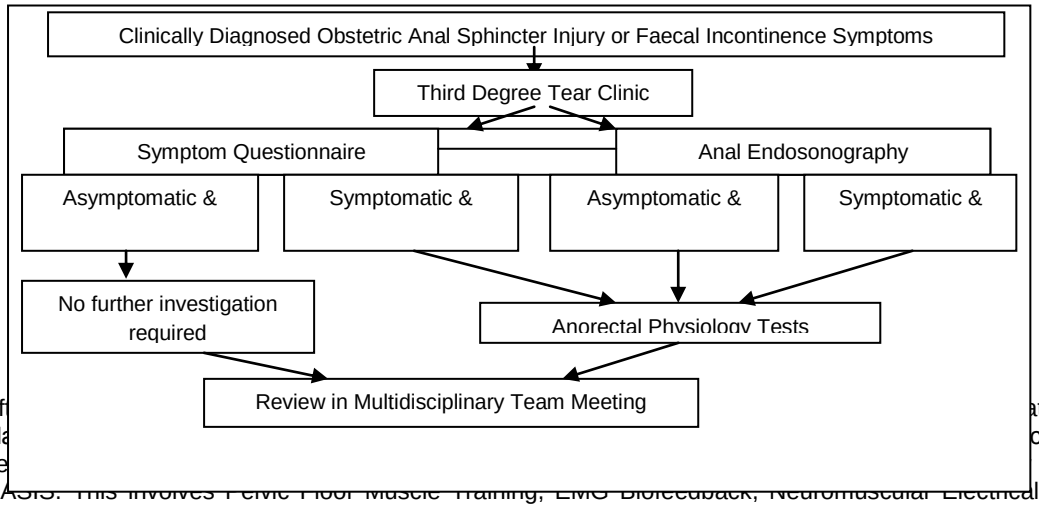
Clinically diagnosed obstetric anal sphincter injury (OASIS) occurs in 2.9% of primiparous women and 0.8% of multips[1]. This injury can lead to bowel symptoms in 28% of women with a third degree tear and 59% with a fourth degree tear[2]. Concurrent urinary incontinence and sexual dysfunction has also been found in women following OASIS.

Triple assessment in a dedicated third degree tear clinic allows rapid access to appropriate investigations and management of pelvic floor dysfunction after OASIS.

Study design, materials and methods

Between June 2005 and March 2008 all women with a clinical diagnosis of obstetric anal sphincter injury were referred to a dedicated clinic three months post delivery for triple assessment. A full history was taken and a three-dimensional anal endosonography (AES) was performed. The scans were reviewed together with the history in a dedicated multi disciplinary meeting. The accuracy of clinical diagnosis of anal sphincter injury was assessed using AES and women with confirmed third degree tears or symptoms of faecal incontinence were referred for anal physiology tests.

Chart 1 Obstetric anal sphincter injury triple assessment algorithm



Af ative management. Conservative Ma ctal nurse. This aims to optimise pe to manage symptoms following OASIS. This involves Pelvic Floor Muscle Training, EMG Biofeedback, Neuromuscular Electrical Stimulation, Bowel Retraining, Advice on lifestyle interventions, Rectal Irrigation and specialist dietary assessment and management[3].

Results

167 women were referred to the third degree tear clinic.

Questionnaire data was available for 119 patients with a mean age of 32 and 75.6% were primiparous. 43(36%) complained of one or more of the following symptoms, faecal urgency, flatus incontinence, passive incontinence or post defecation soiling. 20(17%) complained of urinary stress incontinence. 24(20%) had not resumed intercourse and 24(20%) complained of pain on intercourse.

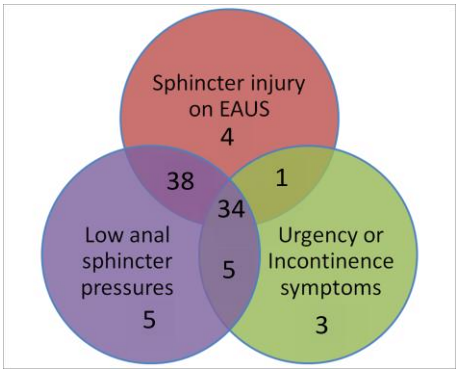
AES results were available for all the patients (n=167). 50(30%) had no injury to the anal sphincters on scan. Anal sphincter injury was confirmed in 117(70%), 50(30%) had a persistent defect, 39(23%) had scaring alone, 26(16%) had evidence of successful sphincter repair and 2(1%) had global atrophy on AES. An internal anal sphincter injury was identified in 54(32.3%) women.

Anorectal physiology was performed on 104 patients. AES evidence of sphincter injury was present in 88 of the women that underwent anal physiology tests. The mean maximal resting pressure in those that had a sphincter injury was 45.2mmHg and the mean incremental squeeze pressure was 46.4mmHg. A further 16 women had anal physiology tests with intact anal sphincters. The mean maximal resting pressure in this group was 48.6mmHg with a mean incremental squeeze pressure of 68.4mmHg.

Questionnaire, Anorectal Physiology and Anal Endosonography (n=90)

The data from this study is summarised in Chart 2 and indicates how the symptom questionnaire, AES and physiology results overlap. The majority of patient with a sphincter defect have low anal pressure and those with symptom have both an evidence of anal sphincter injury and low anal pressure results.

Chart 2 AES, ARP and Symptoms Questionnaire. Total 90 patients



Between June 2005 and March 2008, 43 women were found to be symptomatic. Of these 33 women were referred for conservative management. 27 patients attended and 6 patients failed to attend their appointment for treatment. 22 had significant improvement in symptoms and required no further treatment and were discharged. 1 patient was referred onto psychosexual therapy after improvement of her continence symptoms. 2 women became pregnant and did not complete treatment and a further 2 patients failed to complete treatment and therefore are viewed as treatment failures.

Interpretation of results

Triple assessment allows accurate identification of sphincter injury and anal sphincter function. This then enable identification of patients requiring treatment and fast track to conservative management.

Conservative management has been shown to be effective in treating pelvic floor dysfunction following OASIS to the point where most report satisfaction and do not require further treatment.

Concluding message

Three-dimensional AES is able to reassure over 30% of women that they have not sustained damage to the sphincter.

38% of women were symptomatic and 20% required referral for conservative management. Of those that attended conservative management 85% of women reported an improvement in pelvic floor symptoms.

The dedicated third degree tear clinic with the use of triple assessment, with a multidisciplinary team, enables fast track access to appropriate investigation and treatment.

References

1. Harkin R, Fitzpatrick M, O'Connell PR, O'Herlihy C. Anal sphincter disruption at vaginal delivery: is recurrence predictable? Eur J Obstet Gynecol Reprod Biol 2003 Aug 15;109(2):149-52
2. Nichols CM, Lamb EH, Ramakrishnan V. Differences in outcomes after third- versus fourth degree perineal laceration repair: a prospective study. Am J Obstet Gynecol 2005 Aug;193(2):530-4
3. National Institute for Clinical Excellence (NICE) (2007) The management of faecal incontinence in adults. London: NICE

Specify source of funding or grant	**None**
Is this a clinical trial?	**No**
What were the subjects in the study?	**HUMAN**
Was this study approved by an ethics committee?	**No**
This study did not require eithics committee approval because	**This is an audit of clinical practice in the investigation and treatment of patients with obstertric anal sphincter injury in out institute.**
Was the Declaration of Helsinki followed?	**Yes**
Was informed consent obtained from the patients?	**No**