

OBSTETRIC ANAL SPHINCTER INJURY (OASI): A CAUSE FOR CONCERN?

Aims of Study

To determine the incidence of secondary surgery for anal sphincter defects following obstetric anal sphincter injury using data from the perineal trauma clinic.

Methods

A perineal trauma clinic was established to combine the obstetric, gynaecological and colorectal services in a large UK teaching hospital to provide optimum care for women with OASI. Women who had sustained third or fourth degree tears during childbirth or with anal incontinence precipitated by childbirth were referred. Initial assessment of symptoms and examination of the perineum and a clinical assessment of the sphincter, anorectal physiology including manometry and endoanal ultrasound were performed. Women with a clear anal sphincter defect on endoanal ultrasound, abnormal physiology and symptoms of leakage of solid or liquid faeces were counselled about surgery.

Results

A total of 71 women were offered appointments at the clinic between January 2001 and May 2002. Eight women had anal or perineal problems not complicated by anal incontinence such as anal fissure and a further eight did not attend the appointment. Of the 55 women with known or suspected OASI attending the perineal trauma clinic over this period, 39 women had sustained a recognised 3rd or 4th degree tear at the time of delivery.

Table 1: Symptoms of women attending perineal trauma clinic:

55 women attending the perineal trauma clinic	39 OASI diagnosed at delivery	25 with anal incontinence	9 incontinent of solid and liquid faeces
		14 asymptomatic	
	16 no recognised sphincter injury at delivery	16 with anal incontinence	11 incontinent of solid & liquid faeces
		0 asymptomatic	

Sixteen patients attended the perineal trauma clinic following referral by their midwife or general practitioner. Four of these were seeking a second opinion. The remaining 12 women, who had delivered locally, took a mean of over two years to present to the hospital (range 0-84 months, median 22 months) and had not had a sphincter injury recognised at the time of their delivery.

Table 2: Women offered surgical treatment of anal incontinence:

11 offered surgical repair (20% of women attending)	7 opted for repair	4 anal sphincter repairs	6 continent 1 fistula reformed
		2 combined sphincter & fistula repairs	
		1 recto-vaginal fistula alone	
	4 declined surgery as they had learnt to cope with their symptoms with physiotherapy and pharmacological stool manipulation		

Table 3: Pre and post operative results:

	Pre operatively	Post operatively	P value
St Mark's continence score	Median = 17 Range = 9-22	Median = 0 Range 0-7	P<0.002
Anal canal resting pressures (cm H ₂ O)	Median = 52cmH ₂ O Range = 18-76	Median = 64 cmH ₂ O Range = 54-124cmH ₂ O	P<0.002
Anal canal squeeze pressures (cmH ₂ O)	Median = 100 cmH ₂ O Range = 40-144 cmH ₂ O	Median = 132 cmH ₂ O Range = 124 – 212 cmH ₂ O	P<0.002

Post-operatively, all seven women had marked improvements in their symptoms of anal incontinence and their resting and squeeze anal canal pressures. However, one patient had a persistent ano-vaginal fistula following attempted repair and elected to have a defunctioning colostomy.

Conclusion

OASI carries a high chance of morbidity and women sustaining these injuries should be followed up as many are amenable to treatment. The results from the perineal trauma clinic provide compelling evidence that early referral to specialist services may avoid years of misery by reducing the injury to treatment time.