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# PROSPECTIVE TWO YEAR FOLLOW UP STUDY OF ACUTE OBSTETRIC ANAL SPHINCTER INJURY IN A DISTRICT GENERAL HOSPITAL

## Aims of Study

Disruption of anal sphincter is a recognised complication quoted to occur in between 0.5%-2% of women following vaginal delivery. Bowel symptoms commonly follow anal sphincter injury. Symptoms are rarely volunteered by the patient and therefore adequate follow up is essential in these patients. The aim of the study was three fold. The first was to identify significant risk factors for anal sphincter injury and the second was to assess bowel symptoms and the effect on quality of life. The third aim was to objectively assess how successful we were in the surgical correction of the injury.

#### Methods

Local Ethics Committee approval for the study was obtained. The study was conducted between January 2001- December 2002. 41 patients were identified. 9 patients were lost to follow up. 32 patients were seen in a dedicated perineal trauma clinic at 6 months. Endoanal ultrasound scan was performed at 6 months. 8 patients failed to attend scan. Bowels symptoms were scored using the Cleveland Scores at six weeks and six months. Patients were also asked to fill in Manchester Health Quality of Life Questionnaires at six months. All patients were referred for pelvic floor exercises and biofeedback.

#### Results

The incidence of third degree tear in our unit was 1%. 78% of the patients were nulliparous. 58% of patients had spontaneous onset of labour and 42% had induction of labour. 78% of patients had a normal vaginal delivery. 17% delivered by ventouse and 5% by forceps. Duration of second stage had no bearing on the likelihood of sustaining anal sphincter injury. The episiotomy rate was 26%. 68% of patients had overlap repair and 32% had end to end anastomosis. The average birthweight was 3.7kg. At 6week follow up, 56% of patients were symptomatic. The Cleveland Scores ranged from 1 to 20. Bowel urgency was the commonest presenting symptom (72%), followed by liquid faecal incontinence, flatus incontinence, bowel frequency and painful defaecation. Of the patients who had endoanal ultrasound scan at 6 months following index pregnancy, 20% had persistent anal sphincter injury. 60% of patients with anal sphincter injury were asymptomatic. 15% of patients with intact sphincter were symptomatic with bowel frequency being the commonest presenting symptom. The Manchester Health Questionnaire showed that 30% of patients were found to have an affected quality of life.

### **Conclusions**

Nulliparity, mode of delivery and increasing birthweight were found to be the only significant risk factors for obstetric anal sphincter injury, in keeping with earlier retrospective study from our unit. We successfully repaired anal sphincter injury in 80% of the patients. Although anatomical correction is seen, a significant number of these patients remain symptomatic. Our study also clearly shows that a significant number of patients following anal sphincter injury have affected quality of life. It highlights the importance of offering follow-up support for patients with anal sphincter injury.