

IMPACT OF A PROGRAM TO IMPROVE FOLLOW -UP AFTER OBSTETRIC ANAL SPHINCTER INJURY

Hypothesis / aims of study

Obstetric anal sphincter injury (OASI) is the main cause of anal incontinence in young women. Its diagnosis and adequate repair are key to reducing serious consequences and their impact on quality of life after childbirth.

In June 2008, we implemented a program to improve the outcome of patients who had had OASI in our centre. The program consisted of establishing clinical practice guidelines and implementing a specific training plan. This plan consists of annual theoretical and practical workshop sessions for all staff involved in obstetric health care so as to improve skills in prevention, diagnosis, and repair of these injuries during childbirth. Our guidelines establish specific instructions for management of all OASI at our center. They include prevention, diagnosis and treatment. They also determine follow up over a one-year period to evaluate clinical results and to perform complementary tests to evaluate anal sphincter: endoanal ultrasound and anorectal manometry.

The aim of this study was to evaluate the impact of this program on improving follow-up care at our center for patients with OASI.

Study design, materials and methods

We retrospectively analyzed follow-up data from all women who presented OASI at our center from January 2006 to December 2010. The centre is a tertiary university referral hospital. All OASI diagnosed were repaired at delivery following our guidelines. Data were extracted from a computerised database which records data from all births at the centre. Approval for the study was waived in view of the retrospective nature of the study.

OASI patients were divided into those attended from January 1st 2006 to June 30 2008 (Group A), and those attended from July 1st 2008 until December 31 2010 Group B.

We analyzed two types of variables: those related to pregnancy and childbirth (age, type of delivery, episiotomy, type of injury, attendant and neonatal weight) and those related to follow up (follow-up appointment arranged at discharge, attendance at follow-up visits, symptoms of anal incontinence and performance of endoanal ultrasound and anorectal manometry).

Statistical analysis was performed using the Pearson's Chi-squared test and the Student T test, using SPSS V19.0. Level of significance was $p = 0.05$.

Results

From a total of 6019 vaginal deliveries assisted during the study period, OASI was diagnosed in 123 (2.04%): 44 in Group A and 79 in Group B.

No statistically significant differences were found between groups regarding variables related to pregnancy and childbirth. The incidence of type III injuries was similar in both groups: 95.5% in group A and 93.7% in group B. The non-complete classified type III injuries varied from 93.2% in group A to 32.9% in group B.

Age of patients ranged from 19 - 44 years (mean 31.9) and fetal weight varied between 2145 and 5290 g (mean 3475.5 g). Delivery attendants were physicians (17.35%), resident physicians (74.3%), midwives (4.3%), and resident midwives (4.05%). Episiotomy was performed in 61.8% of cases. Type of delivery was: Thierry spatulas 34.75%, forceps 30.1%, spontaneous delivery 28.45%, and vacuum 6.7%.

All variables related to patient follow-up showed statistically significant differences between groups ($p < 0, 05$). See *Table 1*.

			GROUP		Total
			Group A	Group B	
TR ULTRASOUND (p<0.05)	NO	n	43	46	89
		%	97.7 %	58.2 %	72.4 %
	YES	n	1	33	34
		%	2.3 %	41.3 %	27.6 %
SCHEDULED VISIT(p<0.05)	NO	n	39	16	55
		%	88.6%	20.3%	44.7%
	YES	n	3	63	66
		%	6.8%	79.7%	53.7%
MANOMETRY (p<0.05)	NO	n	0	15	15
		%	.0%	19.0%	12.2%
	YES	n	2	32	34
		%	4.5%	40.5%	27.6%

Interpretation of results

Our program has clearly achieved the proposed initial goal: to improve the follow-up of patients who have had an OASI during childbirth at our centre. The program had a strong impact on the follow up and the number of women attending follow ups has increased significantly. Identification of OASI has also improved. We consider the significant decrease in non- complete grade III classified injuries in the second group (32.9% versus 93.2% in group A) is due to better knowledge and motivation of the staff involved in obstetric care. Our results suggest that closer monitoring of patients with OASI can improve results and thus reduce their sequelae.

Concluding message

The implementation of a program such as that described here improves follow up in patients with OASI and may lead to better outcomes in the future in this setting.

Disclosures

Funding: NONE **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** RETROSPECTIVE **Helsinki:** Yes **Informed Consent:** No