

OBSTETRIC ANAL SPHINCTER INJURY: DO ASYMPTOMATIC PATIENTS BENEFIT FROM A SCHEDULED FOLLOW UP?

Hypothesis / aims of study

As obstetric anal sphincter injury (OASI) occurring during labour may cause anal incontinence symptoms in healthy women, there is general agreement that part of obstetricians workload in the labour ward must be devoted to its prevention, detection and adequate classification and reparation. Emphasis has also been given to the importance of adequate follow up. However, while the nature of such follow up seems to be clear in symptomatic women, it appears to be less concrete in the guidelines when women having suffered an OASI remain asymptomatic. Guidelines probably take into consideration that certain institutions may have limited access to tests usually used for follow up purposes, i.e. anorectal manometry and endoanal ultrasound.

At our tertiary university hospital we conduct a follow-up program at our perineal clinic for all women who have had OASI. This program includes performance of manometry and ultrasound for all participants in the program.

We aimed to investigate the adherence to the intensive follow up program, the prevalence of symptomatic women and the potential value of the implementation of such an intensive program universally.

Study design, materials and methods

In this observational study, we prospectively monitored all patients having been diagnosed of OASI in all vaginal deliveries over a 4-year period, from July 1st. 2008 to July 1st. 2012. All patients with OASI were cited for follow up at 6 weeks and 3, 6 and 12 months postpartum. The workup included thorough clinical evaluation, fulfilment of Wexner score, performance of anorectal manometry and endoanal ultrasound. When anal function was impaired, patients were referred for anal biofeedback sessions.

Variables included in the analysis were citation and their attendance, prevalence of symptoms of anal incontinence as measured with the Wexner score and the results of anorectal manometry and endoanal ultrasound tests.

All outcome measures were summarised by descriptive statistics. Frequency tables were calculated for each categorical variable, with confidence intervals of 95%. Cross-data from Student's *t* test was used to compare each quantitative variable on the basis of sphincter injury, facilitating the mean and standard deviation. Statistical analysis was carried out in SPSS version 21.0.

Results

During the study period, 139 out of a total of 5612 vaginal deliveries were diagnosed of OASI and prospectively followed up. The incidence of OASI during this 4-year period was 2.47% CI 95% (2.07-2.88).

Of the 139 patients, 121 (87.1%) were cited to be followed up at our perineal clinic. 102 of them attended the scheduled visits (73.4%). Of the 102 women who attended, Wexner score results were available in 69. From 69 Wexner tests evaluated, 44 patients (63.4%) had no symptoms and the score was 0. The 25 symptomatic patients (36.2%) had a score ≤ 4 . None of them had a Wexner > 4 .

Results of anorectal manometry and endoanal ultrasound were available from 58 patients. The results of the ultrasound were normal in 41 out of 58 (71%) and abnormal in 17 (29%). Manometry results showed normal values in 20 women(35%)but some alteration in the remaining 38 (65%).

In symptomatic women, with Wexner score ≥ 1 (n=13), manometry showed abnormal results in 7 (53.8%). Notably, in the asymptomatic women for whom results of the manometry test were available (n=28), these were abnormal in 17 (60.7%), but within normal limits in the remaining 11 (39.3%). Table 1.

WEXNER SCORE	ABNORMAL MANOMETRY	NORMAL MANOMETRY	TOTAL
0	17 60.7%	11 39.3%	28 100%
1-4	7 53.8%	6 46.1%	13 100%
TOTAL	24 58%	17 41.5%	41 100%

Interpretation of results

The incidence of OASI in our study was within the limits described in the literature.

13% of patients did not receive an appointment for a perineal clinic visit at discharge from hospital. Of those who were scheduled for a visit, 15.7% failed to attend. This may be related to concerns such as priorities related to newborn care, especially likely in asymptomatic women. However, a potential pitfall regarding information on the OASI that has occurred must be noted. Poor coordination among delivery attendants, the obstetric team on the ward and the patient may occur. Thus, efforts should be made to ensure optimal registry and transmission of the information given to the patient at discharge from hospital. Whatever the cause might have been, 26.6% of patients were lost to follow up in our study.

Though asymptomatic, 60.7% of our patients with OASI showed significant abnormalities in functional tests during the first year after the injury. The fact that the percentage of abnormal functional results was higher in the asymptomatic group than in the symptomatic may be explained by the low numbers available in this study. The high percentage of abnormal results in asymptomatic women supports the implementation of a scheduled follow up protocol. Being aware of these results may help

caregivers offer conservative treatment at early stages and provide adequate counselling regarding preventive measures in subsequent pregnancies.

Concluding message

Our results indicate that an intensive follow up protocol after OASI is valuable even in asymptomatic women as it guarantees a full evaluation. A significant number of asymptomatic women show abnormalities in functional tests. Efforts should be made to increase adherence to a protocol if available.

Disclosures

Funding: NONE **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Comité Ético de Investigaciones Clínicas Hospital de Sant Pau **Helsinki:** Yes **Informed Consent:** No