

Many sphincter injuries are preventable

The incidence of obstetric anal sphincter injuries during delivery in Norway has been halved, but there are large differences between hospitals.

Despite adequate surgical repair of obstetric anal sphincter injuries at delivery, many women experience long-term problems with incontinence of flatus and stool. The incidence of sphincter injuries in Norway increased from 1 % of vaginal deliveries in the 1970s to over 4 % in 2004. The reasons for this increase, and which delivery methods are best suited to reducing the risk of sphincter injury, have been widely discussed.

We have recently published an overview of the latest changes in the incidence of obstetric anal sphincter injuries in the Nordic countries (1), and a study that presents the results from our own hospital (2).

Reduction has lasted over time

We believe that the change in clinical practice in Norway from the 1990s onwards, with less use of perineal protection during the second stage of labour, was a major reason for the unfavourable development. «Hands-off» philosophy, with increasing use of alternative birth positions with poor over-view of the perineum and thereby inability to perform perineal protection during the second stage of delivery was the rule. The changes in delivery practice in Norway are poorly documented, and it is difficult to evaluate the effect of delivery position or perineal protection on the incidence of sphincter injuries retrospectively. The delivery techniques in Finland were not altered to the same extent, and Finland has had a much lower incidence of obstetric anal sphincter injuries than the other Nordic countries.

The Norwegian Board of Health criticised delivery units for high rates of obstetric anal sphincter injuries, and a national action plan to reduce the number of injuries was drawn up in 2006. The incidence of sphincter injuries was to be reduced from 4.1 % to 2 % within two years (3). The national plan recommended «focusing on protection techniques both in spontaneous and operative deliveries» (3), and in many Norwegian delivery units the delivery procedures were changed. Six maternity units in Norway have recently published similar significant reduction in frequency of anal sphincter injuries after implementation of an intervention programme. The intervention consisted of active management of the second stage of labour with standardised perineal protection and lowering the delivery speed of the baby's head, as well as careful instruction of and communication with the woman in all vaginal deliveries (1, 4, 5).

In Norway, there has been a large decline in the incidence of sphincter injuries from 2004 to 2011, from 4.1 % to 2.1 % of all vaginal deliveries. This implies that 4,600 fewer women have suffered such an obstetric delivery injury over the past seven years, compared to what the situation would

«Standardised delivery techniques help to reduce the number of sphincter injuries»

have been without such a dramatic reduction in injury incidence. However, the Medical Birth Registry reports that the incidence varies widely between the hospitals, with a threefold higher incidence of sphincter injuries in hospitals with the highest incidence compared to hospitals with the lowest incidence. The Medical Birth Registry shows that the achieved incidence reduc-

tion in sphincter injuries has lasted over time (1).

Sufficient knowledge to act

It is impossible to predict which individual patients will suffer from sphincter injury. Giving birth to a large infant is a risk factor. However, most women with obstetric anal sphincter injury gave birth to an infant with normal weight. Neither changes in the birth population nor in the diagnosis and reporting of sphincter injuries can explain why the halving of the incidence in Norway took only four years. We maintain that changes in the delivery techniques can explain most of the incidence increase (from 1970 to 2004) and reduction (after 2004) as well as the differences in incidence between delivery units in Norway and between the Nordic countries.

The time trends in the Nordic countries indicate that the incidence of anal sphincter injuries can be affected by changes in the delivery techniques and that the (re)introduction of improved delivery techniques, with active management of the second stage of labour, is necessary to keep the rate of sphincter injuries low. Objections against perineal protection raised by some doctors



Perineal protection – the accoucheur slows down the emerging fetal head with the left hand while the right hand supports the perineum and lifts the fetal chin. Photo S. Sahlstein

and midwives have been the lack of randomised studies showing that routine perineal protection is better than use of perineal protection by the accoucheur following subjective evaluation. Good randomised trials are lacking. Today it is probably not possible for both ethical and practical reasons to carry out a randomised trial (1). Despite the lack of randomised studies we would argue that data from the Nordic birth registries indicate that standardised delivery techniques help to reduce the number of sphincter injuries.

The delivery units that have failed to achieve a reduction in sphincter injury incidence equivalent to the best maternity departments in Norway should learn from the other departments' changes in routines. Data from the Norwegian Medical Birth Registry indicate that women do not get the same obstetric care at all delivery units. There are still over a thousand Norwegian women who suffer this delivery complication annually. It should be possible for all delivery units to achieve as good results as the hospitals with the lowest incidence of sphincter injuries.

Our combined efforts will help to ensure that a greater number of women can avoid a

painful birth injury. In addition to causing less discomfort during the postpartum period, delivery techniques that protect the sphincter will also reduce the risk of ensuing anal incontinence afflictions and possibly the need for a subsequent caesarean delivery.

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Litteratur

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