Practices to improve detection of perineal tears and women's views and experiences of healthcare providers following sustained perineal tear

A systematic review

SBU ASSESSMENTS | ASSESSMENT OF METHODS IN HEALTH CARE AND SOCIAL SERVICES

MARCH 2021 | WWW.SBU.SE/323E

Executive summary

Background

Most women who undergo a vaginal birth will suffer from some degree of perineal tear, especially women who give birth for the first time. Perineal tears can cause major problems in both the short and long term for example pain, psychological distress, dyspareunia, prolapse, and incontinence.

Aim

The aim of this systematic review was twofold: first to assess practices that can improve detection of perineal tears, and secondly to assess views and experiences of received care of women with sustained perineal tears and how information and treatment from healthcare providers affected these views and experiences.

Method

A systematic review was conducted following PRISMA statement. The protocol is registered in PROSPERO (CRD420201260824). The certainty of the evidence was assessed with GRADE.

Inclusion criteria

Quantitative studies:

- **Population:** Women giving birth vaginally in care facilities and who are examined immediately after delivery.
- **Intervention:** All practices that can improve detection of perineal tears and levator ani avulsions.
- **Control:** Treatment as usual or other practices.
- **Outcome:** Detection rate of perineal tears or levator ani avulsions.
- **Study design:** All except case studies.

Quantitative studies:

- **Setting:** Midwife clinics, maternal health care, childbirth clinics, only comparable countries with Swedish settings.
- **Perspective:** Women who have been given birth, a special focus on women who have female genital mutilation, women who do not have the majority language as their mother tongue, and lower socio-economical status.
- **Intervention:** Oral or written information about perineal tears provided within the health care system.
- **Evaluation:** Views, and experiences

Language: English or one of the Scandinavian languages.

Search period: From 1990 to 2020. Final search October 2020.

Databases searched: PubMed, EMBASE, Cochrane Library, CINAHL, and PsycINFO.

Client/patient involvement: No.

Conclusions

- The detection rate of OASIS increases by 37–46% when women are re-examined by an additional midwife or a doctor immediately after delivery (moderate certainty of the evidence).
- Implementation of an operative pro forma and practice guideline increases the reported incidence of OASIS from 1.6% to 3.1% (low certainty of the evidence).
- Adding endoanal ultrasonography to the standard clinical examination of the perineum immediately after vaginal delivery might decrease the risk of severe fecal incontinence 3 to 12 months after delivery (low certainty of the evidence).

The conclusions continues on the next page

Conclusions continued

- We could not identify studies focusing on the diagnostic test accuracy of different methods for detection of levator ani avulsions immediately after vaginal birth.
- Talking about intimate problems causes a feeling of embarrassment for women who sustained perineal tears, and they wish health care professionals would ask direct and specific questions to facilitate these questions (low certainty of the evidence).
- Women with perineal tears feel that a professional, competent, and respectful treatment by health professionals, including individual and situation-adapted information, facilitates and promotes their physical and mental recovery (low certainty of the evidence).

Results

Table 1 Overview of results and their reliability for methods that promote the diagnosis of perineal tears.

How confident are we in the results?	Action	Results	Meaning?
High certainty (⊕⊕⊕⊕). The assessment is that the result is correct	We have judged that none of the results we have found have high certainty.		
Moderate certainty (⊕⊕⊕◯). The assessment is that the result is likely to be correct	Two examiners instead of one, directly after delivery	RR = 0.63 (95% CI, 0.48 to 0.84) RR = 0.54 (95% CI, 0.37 to 0.80)	If a woman is examined by a second examiner, the number of detected perineal tears are increased by 37 to 46%.
Low certainty (⊕⊕◯◯). The assessment is that the result may be correct	Endoanal ultrasound after a clinical examination immediately after delivery	RD = –5.4% (95% CI, –8.9 till –2.0)	3.3% of the women who underwent anal ultrasound had anal incontinence three months after delivery. The corresponding percentage for women who have not received anal ultrasound was 8.7%.
	Changed procedures in the clinic	RR = 1.96 (95% CI, 1.25 to 2.96)	Almost twice as many OASIS are diagnosed.
	Measurement of the distance between the urethra and the levator muscles by ultrasound	The optimal threshold for identifying levator injuries is 2.3–2.4 cm	If the distance between the urethra and the levator muscles exceeds 2.3–2.4 cm, the woman possibly has a levator injury.
Very low certainty (⊕◯◯◯). It is not possible to determine if the results are correct	We cannot assess the effect of **transperineal ultrasound** directly after delivery to predict fecal incontinence four months after delivery.		
	We cannot assess the effect of measuring **anovaginal distance** using ultrasound, directly after delivery.		
	We cannot assess the impact of **training programs** for staff.		
	We cannot determine whether clinical examination results and ultrasound results are consistent when using these methods for diagnosing levator injuries.		
	We cannot determine if clinical examination results and MRI results are consistent when using these methods for diagnosing levator injuries.		
	We cannot determine whether transperineal ultrasound and endovaginal ultrasound results are consistent when the methods are used to diagnose levator injuries.		
	We cannot determine if more levator injuries are identified when using tomographic ultrasound imaging at **rest** or on maximum pelvic floor muscle **contraction**.		

Table 2 An overview of the results of women's experiences and perceptions of the treatment and information from care professionals, and the certainty of the results.

How confident are we in the results?	Theme
High certainty (⊕⊕⊕⊕) The finding is very likely to be a reasonable representation of the phenomenon in question	None of the findings we have found have high certainty.
Moderate certainty (⊕⊕⊕○). The finding is likely to be a reasonable representation of the phenomenon in question	Inadequate care meetings silence women with perineal tears
	No or inadequate information about perineal tears contributes to women's participation and they feel abandoned by caregivers
Low certainty (⊕⊕○○). The finding is possibly a reasonable representation of the phenomenon in question	Strengthening and supporting encounters create security for women with perineal tears
	The focus of caregivers is shifted to the child's health and well-being after birth
	Structural and emotional barriers hinder access to care for women with perineal tears
	Relevant and personalized information given by healthcare providers to women with perineal tears, support recovery
	The lack of the care provider's initiative to talk about women's individual problems after childbirth makes the women irresolute
Very low certainty (⊕○○○). It is not possible to determine whether the finding is a reasonable representation of the phenomenon in question	None of the findings we have found have very low certainty.

Discussion

Both clear care programs and being two examiners are reasonable measures to improve the quality of delivery care today. However, there are problems with the usability of anal ultrasound due to practical difficulties in performing and interpreting. Lack of detailed classification and documentation of perineal tears makes research and clinical follow-up difficult. The methods of examination should be simple but reliable and sensitive. However, there is a need for more knowledge of which methods of examination can be used routinely after delivery.

The diagnosis, treatment, and information about childbirth-related injuries are closely linked. Competence in diagnosis and treatment is essential for the care staff who meet these women to provide adequate assessment and treatment with clear and individually adapted information and follow-up.

Project group

Experts

Eva Uustal. Department of Obstetrics and Gynecology, and Department of Clinical and Experimental Medicine, Linköping University, Sweden

Margareta Persson. Department of Nursing, Umeå University, Umeå, Sweden

Maria Lindkvist. Department of Clinical Sciences, Obstetrics and Gynecology, Umeå University, Sweden

Marie Bolin. Department of Obstetrics and Gynecology, Sundsvall County Hospital, Sundsvall, Sweden

SBU

Naama Kenan Modén (Project Manager)

Nathalie Peira (Assistant Project Manager)

Caroline Jungner (Project Administrator)

Ann Kristine Jonsson (Information Specialist)

Scientific reviewers

Sophia Brismar Wendel, Department of Obstetrics and Gynaecology, Danderyd Hospital, Stockholm, Sweden; Department of Clinical Sciences, Karolinska Institutet, Danderyd Hospital, Stockholm, Sweden

Susanne Åhlund, Department of Women's and Children's Health, Karolinska Institutet, Stockholm, Sweden

SBU Assessments no 323, 2021

www.sbu.se/en • registrator@sbu.se

Graphic Design: Åsa Isaksson, SBU