



Abstracts

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Background

Stress urinary incontinence (SUI) affects up to 36% of women. It reduces the quality of life and increases the economic burden. The Nordic countries share similar population ethnicity and economic approaches, which allows comparison across the countries. We conducted a state-of-the-art review of management of female SUI in the Nordic countries.

Materials and methods

A 21-question survey concerning female SUI was created and refined by an expert group comprising leading urogynecologists from each Nordic country. Data were gathered from the questionnaire, national guidelines, Nordic registries, and clinical practices. Additionally, a literature search was conducted.

Results

Diagnostic criteria and pre-operative evaluation are mostly consistent across the countries, whereas differences were noted in the utilization of stress test and uroflowmetry measures. Norway had highest prevalence of invasive treatments. In Denmark, Norway, and Sweden postoperative follow-up is documented in the national registries, while no such follow-up is conducted in Finland and Iceland. The literature review revealed a strong interest in the long-term effects of mid-urethral sling (MUS) operations, comparability of MUS versus injection treatments, the efficacy of conservative treatment strategies, and the overall quality of life associated with SUI.

Conclusion

Differences in the frequency of invasive treatments, and the lack of follow-up procedures in Finland and Iceland warrant further discussion of the development of common Nordic strategies. Current Nordic literature lacks studies on the costs and cost-effective strategies for SUI, underscoring the need for further research.

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Introduction

This study aimed to assess the contribution of pregnancy, delivery mode, obstetric anal sphincter injury (OASI), and age on bowel incontinence in women aged 40-64 years.

Material and methods

Data from the Swedish Medical Birth Register and the Total Population Register were linked to responses from a bowel incontinence questionnaire (2014-2015). The study included women 20 years after the first birth who had BMI data: 4192 nulliparas (controls), 2411 with two cesarean deliveries (CDs), and 6877 with two vaginal deliveries (VDs). Women were matched by exact age and BMI (± 3 units), yielding three cohorts of 1961 women each. A subgroup analysis compared vaginally delivered women with and without OASI.

Results

The prevalence of fecal incontinence (FI) was higher in women with 2 VDs (14.2%, $p=0.0001$) and nulliparous women (12.9%, $p=0.0095$), compared with 2 CDs (10.2%). Both bothersome fecal ($p=0.0014$) and anal ($p<0.0001$) incontinence were more common following VD compared to CD. Among women with OASI, the prevalence of FI nearly doubled (23.3% vs 13.7%, $p=0.0095$), and they had a higher Wexner score (2.38 vs 1.42, $p=0.0004$), increased use of protective products (7.8% vs 3.0%, $p=0.025$), and a greater impact on daily lifestyle (20.7% vs 10.1%, $p=0.0016$) compared to those without. Only women with two VDs showed a significant age-related increase in FI (Figure). Conclusion Long-term FI was more common and severe after VD, particularly after OASI. An age-related effect on FI was observed only among VDs. Preventing OASI remains an important obstetric target to reduce FI later in life.

Main author: Ojala, Johanna

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Background

The aim of our study was to evaluate perioperative safety and subjective short-term outcome when operating pelvic organ prolapse with the Calistar-S® vaginal mesh.

Materials and methods

We conducted a prospective, multi-center cohort study of 92 patients undergoing POP surgery with Calistar S®- vaginal mesh during October 2018 and December 2022. Complications were reported from the time of surgery until the three-month follow-up visit. The Clavien-Dindo classification system was used to categorize complications. Subjective results were evaluated with the Pelvic Floor Distress Inventory (PFDI-20) and the Patient Global Impression of Improvement questionnaires (PGI-I).

Result

No intraoperative complications occurred. The mean blood loss was 75.8 ml (range 5-300ml).

During follow-up, 18 complications were reported; 78 % were classified as Clavien-Dindo class I or II, and no severe (class IV-V) complications occurred. The complications included urinary retention (six patients), urinary tract infection (four patients), mesh erosion (three patients), hematoma (two patients), granulation tissue (two patients), and postoperative fever (one patient). On PFDI-20, pelvic pain resolved in 77.8 % of patients, four patients (4.3%) reported new pelvic pain. Voiding difficulty resolved in 78.2% of patients, while five patients (5.4%) developed de novo symptoms. De novo stress urinary incontinence occurred in seventeen (18.5%) patients. On PGI-I, 83.3% of patients reported feeling “very much” or “much” improved, while 7.7% reported feeling worse.

Conclusion

The Calistar-S® anterior/apical vaginal mesh is a safe surgical option for treating advanced anterior and apical pelvic organ prolapse, with only minor perioperative complications and reassuring short-term subjective outcome.

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Background

Levator ani avulsion (LAA) is a pelvic floor injury affecting 13-36% of women after vaginal delivery and is linked to long-term consequences such as prolapse and incontinence. Obstetric anal sphincter injury (OASI) and minor perineal tears share risk factors with LAA, but their potential association remains underexplored. This study explores whether LAA incidence varies by perineal tear severity in primiparous women.

Materials and methods

We performed a systematic review according to PRISMA guidelines. The literature search was made in PubMed, Embase, and Cochrane Library. Two authors screened the articles independently and extracted relevant data.

Results

We included 13 studies, in which 3584 primiparae participated in total. We found an incidence of levator ani avulsion of 13% (95%CI: 10-17%) among women without perineal tear, 24% (95%CI: 20-
st n^{29%}) among
with a 1st -degree tear, 22% (95%CI: 18-25%) in women with a spontaneous 2nd -degree tear, 23% (95%CI: 17-29%) among the women with episiotomy, and 35% (95%CI: 30-40%) among those with OASI. In some studies, they had grouped the women without a tear with the 1st - and 2nd -degree tears, and their total incidence was 16% (95%CI: 14-18%).

Conclusions

LAA commonly occurs after vaginal delivery, although its incidence varies with the severity of the perineal tear. We found that women with OASI have twice the risk of LAA compared to women without a tear. The incidence among women with an episiotomy was similar to that among women with a spontaneous 2nd -degree tear.

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Background

Menopause, aging, reproductive history, factors increasing intra-abdominal pressure, and lifestyle choices may lead to structural and functional failure in the pelvic floor. Body composition is partly result of lifestyle choices; thus, it can be considered as a modifiable factor revealing a woman's risk for experiencing symptoms of pelvic floor disorders. The objective of this study was to investigate the association of body composition with stress and urgency urinary incontinence, fecal incontinence, and feeling of pelvic organ prolapse among middle-aged women.

Materials and methods

A longitudinal study was performed using a population sample of 376 Finnish women aged 47 to 55 years at the baseline. Total and regional body composition was assessed by both dual x-ray absorptiometry (DXA) and multifrequency bioelectrical impedance analyzer (BIA). Anthropometric measures, including body mass index (BMI) and waist circumference, were taken. The symptoms of pelvic floor disorders were assessed using self-report questionnaires. Generalized estimating equations models were adjusted with demographical, gynecological, and physical activity variables.

Results

The change in body composition was not associated with the change in the symptoms of pelvic floor disorders after four-year follow-up. Instead, current total fat mass, trunk fat mass, android fat mass, visceral fat area, BMI, and waist circumference were associated with the current symptoms of stress urinary incontinence. Conclusions This information is important in counselling middle-aged female patients about modifiable risk factors for pelvic floor disorders and would indicate that weight loss and/or change in body composition is a therapeutic target for the treatment of stress urinary incontinence.

Main author: Belluardo, Martina

Belluardo, Martina - Main Author¹; Øyasæter Nyhus, Maria - Co-Author^{1,2}; Svenningsen, Rune - Co-Author^{3,4,5}; Volløyhaug, Ingrid - Co-Author^{1,2}

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Background

With increasing life expectancy, ensuring quality of life is essential. Sexual activity and function are understudied in postmenopausal women. Our aim was to investigate whether the mode of delivery has an impact on sexual health in later years.

Material and methods

In 2024, 965 questionnaires containing PISQ-IR (Pelvic Organ Prolapse/Urinary Incontinence Sexual Questionnaire) and FSFI (Female Sexual Function Index) were collected from a health survey of 1,641 women who had their first child in Trondheim between 1990 and 1997 (response rate 58.8%). Participants were grouped by delivery methods: normal vaginal delivery (NVD), cesarean delivery (CD), vacuum delivery (VD), and forceps delivery (FD). Multiple logistic regression was used to compare sexual activity between delivery methods, adjusting for age, parity, and BMI.

Results

Mean age was 58.2 years, BMI 26.7 kg/m², and 2.28 children. In total 686 (71.5%) women were sexually active according to the PISQ-IR questionnaire. Delivery type was not associated with sexual activity. Age was a significant risk factor for sexual inactivity when comparing NVD vs CD, adjusted odds ratio (aOR) 1.09, 95% confidence interval (CI) [1.04–1.14], NVD vs FD aOR 1.10, 95% CI [1.06–1.15], and NVD vs VD aOR 1.09, 95% CI [1.05–1.14]. Increasing BMI was significant when comparing NVD with CD aOR 1.07, 95% CI [1.03–1.12] and VD aOR 1.06, 95% CI [1.02–1.10].

Conclusions

Mode of delivery was not associated with sexual activity 27-34 years after first delivery in this cohort. Risk factors for sexual inactivity were higher age and increasing BMI.

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Study Objective

To show an educational video of the original technique of hysteropexy laparoscopic lateral suspension (LLS) in a case of pelvic organ prolapse.

Design

Stepwise descriptions of the technique according to Delphi consensus of experts, with narrated video footage.

Setting

Pelvic organ prolapse (POP) is a highly prevalent condition, affecting women around the world and causing a significant impact on quality of life. Its prevalence ranges up to 56%. Laparoscopic sacropexy (LSCP), based on available evidence, is still the gold standard technique for the correction of advanced apical and multicompartmental POP. But dissection at the level of the promontory may be challenging, particularly in obese patients or in those with anatomic variations. In the other hand, most of surgical procedures for POP have associated hysterectomy. In the last years the percentage of hysteropexy is increasing, as an attractive alternative for women who wish to preserve their uterus. LLS with mesh represents an alternative procedure easier than LSCP, avoiding dissection at the promontory. However, LLS is not a simple procedure and that it requires specific technical attentions and training. The aim of this video is to describe the standardized procedure of LLS, step-by-step, according to the Delphi consensus of experts, published in 2024. A titanized T-shaped polypropylene mesh is used.

Conclusion

The LLS is a good alternative technique to LSCP, providing the patient the benefits of minimally invasive approach.

Reference 1 Simoncini T, Panattoni A, Cadenbach-Blome T, Caiazzo N, García MC, Caretto M, et al. Role of lateral suspension for the treatment of pelvic organ prolapse: a Delphi survey of expert panel. *Surg Endosc*. 2024 Aug 1;38(8):4344–52.

Reference 2 Veit-Rubin N, Dubuisson J, Constantin F, Lange S, Eperon I, Gomel V, et al. Uterus preservation is superior to hysterectomy when performing laparoscopic lateral suspension with mesh. *Int Urogynecol J.* 2019 Apr 9;30(4):557–64.

Main author: Sartoneva, Reetta

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Background

Concerns related to the non-degradable vaginal meshes have increased interest in biodegradable biomaterial development for pelvic organ prolapse (POP) applications. Such biomaterials should be biocompatible, meet application-specific mechanical properties, degrade without disadvantageous tissue reactions, and promote collagen regeneration^{1,2}. Most frequently studied biodegradable biomaterials for POP are poly(α -ester)s as polylactide, polycaprolactone, or their copolymers as poly(L-lactide-co- ϵ -caprolactone) (PLCL)². Our aim is to enhance collagen production by developing a PLCL scaffold releasing ascorbic acid 2-phosphate (A2P), a stable vitamin C derivative known to stimulate collagen synthesis and cell proliferation.

Materials and methods

We evaluated the A2P-releasing PLCL both in vitro and in vivo. In vitro, we evaluated the effects of A2P-releasing PLCL on vaginal fibroblast and adipose stromal cell viability, proliferation, and collagen production during 14d cell culturing compared with PLCL without A2P. In vivo, we assessed the impact of A2P-releasing PLCL on inflammatory response, collagen formation, and mechanical properties in comparison with plain PLCL, polypropylene (PP) mesh, or sham surgery in a rat abdominal model. Female Sprague-Dawley rats (n=7/material/timepoint) were followed for 1 week, 1 month, or 6 months.

Results

A2P-releasing PLCL significantly improved cell proliferation and collagen production compared to plain PLCL in vitro. Further, the A2P seems to increase the total collagen amount also in vivo and facilitate the tissue ingrowth to the material without increased stiffness, disadvantageous fibrosis, or inflammatory reactions.

Conclusions

A2P-releasing PLCL scaffolds demonstrated a potential for future POP applications. However, further long-term studies on efficacy and safety are required before aiming to clinical translation.

Reference 1 Wang, L. et al. Influence of the mechanical properties of biomaterials on degradability, cell behaviors and signaling pathways: current progress and challenges. *Biomater Sci.* 2020; 8: 2714–2733, doi: 10.1039/D0BM00269K.

Reference 2 Mancuso, E. et al. The use of polymeric meshes for pelvic organ prolapse: Current concepts, challenges, and future perspectives. *J Biomed Mater Res B Appl Biomater.* 2020; 108: 771-789. doi: 10.1177/0885328216633373.

ID 21 — Initial experience of Laparoscopic Pectopexy and Colporrhaphies in Finland.

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Background

To evaluate initial outcomes of laparoscopic pectopexy combined with laparoscopic colporrhaphy for symptomatic pelvic organ prolapse during surgeons' learning curve. Materials and Methods The first 50 patients operated on between 8/2017–10/2020 for symptomatic vaginal vault or uterine prolapse POP-Q stage ≥ 2 were included. Data was collected retrospectively from medical records. Primary outcome measure was relief of prolapse symptoms; secondary outcome measures were anatomical results and perioperative complications at ~4 months follow-up.

Results

The relief of prolapse-related symptoms was achieved in resolution of sensation of bulge in 74%, in voiding difficulty 89.7%, and in defecation difficulty 65.4%. De novo defecation symptoms developed in 4.2%. The mean operative time was 205 ± 50.3 minutes (111–400), and mean EBL 101 ± 74.7 ml (10–400). Simplified POP-Q classification measurements significantly improved postoperatively: Ba 3.84 ± 2.57 cm, C/D 8.86 ± 3.70 cm, Bp 2.42 ± 3.20 cm ($p < .001$). Complications included three urinary tract infections, one bladder injury, one symptomatic seroma, and one aspiration pneumonia. Anatomical recurrence rates were 4% at the apex, 31.3% after laparoscopic anterior colporrhaphy, 33.3% after laparoscopic posterior colporrhaphy, and 16.7% after combined posterior colporrhaphy techniques.

Conclusion

Initial experience with laparoscopic pectopexy and colporrhaphy demonstrates favorable anatomical and symptomatic outcomes with low complication rates, even during the early phase of the learning curve. Concomitant repair of vaginal walls appears critical to optimal symptom relief. However, results are less favorable than in expert-level series, highlighting the need for further prospective evaluation.

Main author: Juul, Sofie Lindman

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Background

Although the thromboembolic risk associated with oral estrogen is recognized, the risk profile of vaginal estrogen treatment remains inconclusive. This scoping review aims to explore the available evidence on the association between vaginal estrogen treatment in postmenopausal women and the risk of thrombosis.

Methods

We conducted a systematic search of PubMed and Embase for all records up to May 21, 2025. The process was guided by the PRISMA-Scr and performed according to a preregistered protocol (). We excluded systemic estrogen treatments, contraception, fertility treatments, gender affirming therapies, or hormone treatments other than estrogen. Included study designs were clinical trials, randomized control trials, observational studies, case-control studies, and cohort studies. The search strategy identified 866 articles, whereof 8 were eligible. Manual search through citations and references yielded 3 additional studies, and a total of 11 articles were included.

Results

One study reported a lower risk of recurrent myocardial infarction associated with discontinuation vs. continuation of vaginal estrogen. Remaining 10 cohort and case-control studies found a decreased to no thromboembolic risk associated with vaginal estrogen use compared to no estrogen use; for venous thromboembolism (articles: n=6), effect estimates ranged from aHRs 0.68 [0.36–1.28], to 1.06 [0.58–1.93], similar for myocardial infarction (n=5), aHRs ranged from 0.52 [0.31–0.85] to 0.83 [0.77–0.89], and for stroke (n=6), aHRs ranged from 0.68 [0.62–0.70] to 0.96 [0.93–0.99].

Conclusion

This scoping review demonstrates no increased risk of thrombosis associated with vaginal estrogen in postmenopausal women. Further prospective high-quality clinical trials are warranted.

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Background

Levator ani injury (LAA) is linked to pelvic floor dysfunction, but its occurrence after second-degree tears and episiotomy is less well described. We aimed to determine the prevalence of LAA and its associations with pelvic floor symptoms 9–12 months postpartum.

Materials and methods

This study used follow-up data from the REPAIR-study a randomized, controlled, double-blinded trial including 442 women. At 9–12 months postpartum, 333 participants completed a questionnaire, gynecological examination, and 3D endovaginal ultrasound. Ultrasound volumes were assessed by two blinded reviewers, with complex cases reviewed by an external expert. LAA was defined as a levator ani deficiency (LAD) score >6. Anatomical prolapse was defined as POP-Q stage ≥2, and diagnostic prolapse as anatomic prolapse with symptoms (vaginal bulge sensation ≥weekly).

Results

LAA was identified in 10% (n = 34). Women with LAA had higher rates of anatomical prolapse than those without (44.1% vs 13.7%, p < 0.001), mainly anterior. Bulge sensation ≥weekly occurred in 11.8% with LAA versus 2.0% without (p = 0.01), and diagnostic prolapse was more common (8.8% vs 1.0%, p = 0.016). Overall urinary incontinence rates were similar (47.1% vs 41.1%, p = 0.58), although daily incontinence was more frequent in women with LAA (8.8% vs 1.7%, p = 0.038). Associations were consistent across parity groups.

Conclusions

One in ten women with a second-degree tear or episiotomy had LAA at 9–12 months postpartum. LAA was strongly associated with anatomical and symptomatic prolapse but not with overall urinary incontinence, although daily incontinence appeared more common.

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Background

Sexual function is an important outcome after post-hysterectomy vaginal vault prolapse surgery, yet differences between surgical techniques remain unclear. This study evaluated sexual function and vaginal symptoms 3–14 years after six primary apical suspension procedures.

Methods

In a nationwide cohort of 1,016 women, primary procedures included sacrocolpopexy (SCP), laparoscopic/robotic uterosacral suspension (LUSLS), ipsilateral uterosacral suspension (IUSLS), vaginal extraperitoneal uterosacral suspension (VEULS), sacrospinous ligament fixation (SSLF), and SSLF with graft. Vaginal symptoms were analyzed for all participants, and sexual function was evaluated among sexually active women (n = 287) using the International Consultation on Incontinence Questionnaire—Vaginal Symptoms (ICIQ-VS). Analyses were adjusted for age, follow-up time, and prior colporrhaphy.

Results

SSLF with graft was associated with impaired sexual function (adjusted ratio 4.07, 95% CI 1.19–13.91; ref. SCP). Overall vaginal symptom scores were low across procedures. A substantial number of women initially treated with other suspension techniques later underwent SSLF with graft, sexual outcomes were assessed for this group overall. Among all women with SSLF with graft (n = 125), 33 (26.4%) were sexually active, with a median ICIQ-VS sexual-matter score of 1 (IQR 0–18), comparable to the total cohort. Six of 51 (11.8%) primarily operated and 16 of 125 (12.8%) reported sexual inactivity due to vaginal discomfort. Conclusion Primary SSLF with graft was associated with impaired sexual function. Including secondary SSLF with graft cases did not increase the observed sexual burden. The proportion reporting sexual inactivity due to vaginal discomfort was similar for primary and secondary procedures.

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Background

A national registry study comparing long-term malignancy development in women with and without implantation of a mid-urethral polypropylene sling for female stress or mixed urinary incontinence.

Materials and methods

Data from the Norwegian Patient Registry identifying all women over age 20 years who received a mid-urethral polypropylene sling from 2008 through 2020 were coupled with data from the National Cancer Registry to identify women who later developed cancer of the bladder, urethra or vagina. Observation period was from 2009 through 2023 (1-15 years, median 9 years). The incidence of cancer development in women with a mid-urethral sling was compared to the incidence in the general female population over 20 years who had not received a mid-urethral sling using Chi² test.

Results

Among 31 852 women operated, there were 17 cases of bladder, urethral or vaginal cancer (0.05%) as compared with 2 875 cases among 1 923 142 non-operated women (0.15%), $p < 0.01$.

Conclusions

The result of this large, national registry study strongly suggests no increased risk of women developing cancer in neighboring organs after implantation of a polypropylene mid-urethral sling for stress or mixed urinary incontinence. As this was anonymous data, no adjustments for BMI, age or relevant comorbidities could be made.

Reference 1 Wang, L. et al. Influence of the mechanical properties of biomaterials on degradability, cell behaviors and signaling pathways: current progress and challenges. *Biomater Sci.* 2020; 8: 2714–2733, doi: 10.1039/D0BM00269K.

Reference 2 Mancuso, E. et al. The use of polymeric meshes for pelvic organ prolapse: Current concepts, challenges, and future perspectives. *J Biomed Mater Res B Appl Biomater.* 2020; 108: 771-789. doi: 10.1177/0885328216633373.

Main author: Rexelius, Niklas

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Background

Second-degree perineal tears are common obstetric injuries and may contribute to pelvic floor dysfunction (PFD). The relationship between residual perineal body thickness and subsequent PFD remains unclear.

Materials and methods

A historical cohort of women giving birth in Region Västernorrland, Sweden between January 2018 and June 2023 were identified through the Perineal Laceration Registry within the Swedish National Quality Registry for Gynecological Surgery. Residual perineal thickness before suturing was categorized as >2cm, 1-2cm or <1cm. PFD symptoms, including bulging, urinary incontinence, difficulty with defecation, need for digital assistance, anal incontinence, and dyspareunia were assessed before pregnancy and again one year postpartum and combined into a single measure indicating at least one reported symptom. A secondary analysis explored the impact of deep vaginal tears.

Results

Of 1766 women with second-degree tears 1060 had complete data on residual perineal thickness and follow-up questionnaires. Among these, 459 women had >2cm, 545 had 1-2cm, and 56 had <1cm. One year postpartum, more than half reported at least one symptom of PFD: 56.5% (>2cm), 55.0% (1-2cm), and 51.9% (<1cm). Which is significantly higher than before pregnancy ($p=0.035$, $p<0.001$ and $p<0.001$). Those with a deep vaginal tear reported more days on pain medication (10.0 vs 5.2 days $p<0.001$) After adjusting pre-pregnancy symptoms and potential confounders, no significant association was found between residual perineal thickness and PFD.

Conclusions

Second-degree perineal tears are linked to a high prevalence of PFD and deep vaginal tears may prolong postpartum pain. Residual perineal thickness before suturing is not associated with PFD.

Sommer, Martin - Co-Author¹

¹Doctor

Background

Polyacrylamide hydrogel (PAH) use for female stress urinary incontinence (SUI) has had a marked increase in Norway. Using data from the mandatory Norwegian Female Incontinence Registry (NFIR), this study aimed to identify predictors for both subjective failure (outcome 1) and the need for a later mid-urethral sling (outcome 2).

Materials and methods

Preoperative anonymous data from 2014–2022 with 6–12 months follow-up was used. Subjective failure was defined as stress index > 3 calculated from the validated NFIR questionnaire (range 0–12). Multivariate logistic regression was used for both outcomes. Hospitals were grouped by annual PAH surgical volume (<30, 30–99, ≥100). Adjustments were made for Age, Body Mass Index, hospital PAH surgical volume, preoperative leakage (stress test), preoperative stress (0–12) and urgency (0–8) symptom indices.

Results

In total 1527 women received PAH in the study period with complete follow-up data. Predictors for subjective failure was increasing preoperative stress symptom bother; stress-index ≥ 10, aOR: 1.64 (95% CI 1.17-2.30) and gram leakage ≥ 33 g on preoperative stress test aOR: 1.43 (95 % CI: 1.04-1.99). The risk was increased with decreasing age. Age <40 years aOR: 4.08 (95 % 2.40-6.93). Predictors for a subsequent sling was degree of preoperative leakage and age; stress-test ≥ 33 g, aOR 2.03 (95 % CI 1.24-3.33) and age < 40 aOR: 19.58 (95 % CI 6.82-56.24).

Conclusions

The risk of subjective treatment failure and sling after PAH decreased with increasing age but increased with degree of symptoms and preoperative leakage.

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Background

Laparoscopic sacropexy (SCL) is the gold standard technique for the correction of apical pelvic organ prolapse (POP). However, other easier laparoscopic techniques such as laparoscopic lateral suspension (LLS) have become popular.

Methods

A multicentre randomized study of patients undergoing laparoscopic repair of apical and anterior prolapse. Patients were randomized into 2 groups: LLS vs SCL. A non-inferiority study was proposed in which the null hypothesis was that the difference in the proportion of therapeutic failures among women who undergo LLS compared to SCL is $\geq 15\%$. It was necessary to include 182 participants to detect a risk difference of 15% after one year with a statistical power of 0.80).

Results

We have recruited 176 women of whom 106 patients had undergone surgery with a follow-up between 1 and 12 months. There were no differences in basal characteristics. Regarding physical examination, there were no differences at stages III-IV in the POP-Q or the symptom scales in both groups. Concerning post-surgical results there were no failures detected in the physical examination in any group. There were no differences in the points of the POP-Q or in the symptom scales. We only found significant differences in the operative time, being shorter for the LLS.

Conclusion

Although these are preliminary results, since the sample is of 106 patients and the follow-up time is a limited period at the moment, we do not find any post-surgical differences between the 2 techniques. However, it will be necessary to complete the trial to draw relevant conclusions.

Reference 1 Níquez-Sevilla I, Sánchez-Ferrer ML, Ruiz-Cotorruelo VL, Wilczak M, Chmaj-Wierzchowska K, Solano-Calvo JA, Pérez-Muñuzuri ME, Salinas-Peña JR, Arense-Gonzalo JJ. Preliminary Results of a Multicenter Randomized Clinical Trial for Laparoscopic Repair of Pelvic Organ Prolapse: Sacropexy vs. Laparoscopic Lateral Suspension. *J Clin Med.* 2025 Mar 18;14(6):2069. doi: 10.3390/jcm14062069. PMID: 40142877; PMCID: PMC11943180.

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Background

Second-degree perineal tears, involving the bulbocavernosus and/or superficial transverse perineal muscles, are common after vaginal deliveries(1) and may lead to wound dehiscence, infection, and long-term pelvic floor dysfunction(2). Despite this, risk factors for deep wound dehiscence involving perineal musculature remain insufficiently studied. This study aimed to identify risk factors for deep wound dehiscence in second-degree tears.

Materials and Methods

A single-centre case–control study (1:2 ratio) was conducted including 105 cases with 2 degree perineal tears complicated by deep wound dehiscence, within two weeks postpartum and 210 controls with second-degree tears without dehiscence. Exposure data were retrieved from medical records. Univariate analyses were performed using Mann–Whitney U and Fisher's exact tests. Variable selection used Lasso regression with leave-one-out cross-validation. Multivariate logistic regression generated adjusted odds ratios (aOR). Statistical significance was set at $p<0.05$.

Results

Women with wound dehiscence were more often vaginal primiparas (87% vs 69%, $p<0.001$) and had higher rates of episiotomy (33% vs 7%, $p<0.001$). Intrapartum antibiotics were administered less frequently among cases (7% vs 20%, $p=0.002$). Cases had longer second stage of labour, more active pushing, and greater postpartum bleeding. After multivariate adjustment, only episiotomy (aOR 4.40, 95% CI 2.10–9.64) and intrapartum antibiotic administration (aOR 0.21, 95% CI 0.07–0.50) remained significantly associated with wound dehiscence.

Conclusions

Episiotomy substantially increased the risk of deep wound dehiscence in second-degree perineal tears, while intrapartum antibiotics were protective. These findings support selective episiotomy use and suggest that antibiotic prophylaxis may benefit women receiving episiotomy. Larger multicentre studies are warranted.

Reference 1 Smith LA, Price N, Simonite V, Burns EE. Incidence of and risk factors for perineal trauma: a prospective observational study. *BMC Pregnancy Childbirth*. 2013;13:59

Reference 2 Gommesen D, Nohr EA, Drue HC, Qvist N, Rasch V. Obstetric perineal tears: risk factors, wound infection and dehiscence: a prospective cohort study. *Arch Gynecol Obstet*. 2019;300(1):67–77.

ID 27 — The REPAIR Study: Effect of Prophylactic Antibiotics on Wound Complications and Their Association with One-Year Symptoms

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Background

Second-degree tears and episiotomy may lead to wound complications with potential long-term consequences. Evidence on the effect of antibiotic prophylaxis in this setting is limited.

Materials and methods

This double-blind, placebo-controlled randomized trial included 442 women with second-degree tears or episiotomy, randomized to three oral doses of amoxicillin with clavulanic acid or placebo postpartum. The primary outcome, overall wound complications, was defined as infection (purulent discharge or abscess) and/or wound dehiscence >5 mm. The secondary outcome, clinically relevant wound complications, was defined as complications requiring clinical follow-up based on extent of dehiscence, pain severity, or signs of infection. Clinical follow-up occurred at 4–14 days, and 9–12 months post-partum. Multivariable logistic regression adjusted for predefined covariates.

Results

The primary outcome did not differ significantly between groups. Clinically relevant wound complications occurred in 9% (19/218) in the antibiotic group versus 17% (36/215) in the placebo group ($p=0.01$), NNT=12. Multivariable analysis confirmed the independent protective effect of prophylaxis. At 9–12 months, differences between randomization groups were not statistically significant, though there was a consistent, non-significant trend towards fewer prolapse symptoms, better body image, and fewer sexual difficulties in the antibiotic group. Across groups, women who had experienced a clinically relevant wound complication reported significantly worse outcomes in all these areas.

Conclusions

Antibiotic prophylaxis significantly reduced clinically relevant wound complications. Women with such complications had worse pelvic floor-related symptoms one year postpartum, linking early wound morbidity to less favorable long-term outcomes and suggesting a possible long-term benefit of antibiotic prophylaxis.

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Background

Perineal wound dehiscence occurs in up to 20% of women with a second-degree perineal tear. The morbidity associated with perineal wound dehiscence can pose a severe threat to the mother's quality of life. However, there is a lack of qualitative studies on dehisced perineal tears. This study aimed to describe women's experiences of perineal wound dehiscence of a second-degree perineal tear and choice of resuturing or conservative treatment in the first two months after birth.

Materials and methods

A purposeful sampling of 17 women was recruited from two Perineal Clinics in Denmark. Semi-structured individual interviews were used to collect data. The data were analysed based on Braun and Clarke's reflexive thematic analysis.

Results

Three main themes were identified: (1) The unforeseen troubles: For women who experienced perineal wound dehiscence, postnatal pain escalated markedly. The complication had negative consequences for their daily lives. (2) The emotional turmoil: The women described a profound sense of crisis linked to feeling physically "un-intact." Deciding between resuturing and conservative treatment was perceived as an isolating and difficult choice. (3) Living with changes: Women described gradually finding ways to cope with protracted healing and ongoing pain, but worried about future births.

Conclusions

The findings indicate that wound dehiscence was related to a painful postpartum period and an altered body image, and that the women generally found choosing between resuturing or conservative treatment difficult.

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