PROGRAM & ABSTRACT BOOK

33rd Bi-Annual Meeting of the Nordic Urogynecological Association (NUGA)

1 - 3 February in Malmö, Sweden.

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LIST OF SPONSORS & EXHIBITORS

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WELCOME NOTES

We are pleased to invite you to the 33rd Bi-Annual Meeting of the Nordic Urogynecological Association (NUGA) The conference will be held from 1 - 3 February in Malmö, Sweden.

NUGA is a none profit committee of urogynecologists from all Nordic countries. The purpose of NUGA is to organize and plan bi-annual meetings in the Nordic countries for urogynecologists and other healthcare workers emphasising the latest updates in the field of urology and urogynecology. Our purpose is also to give young scientists the opportunity to present their work. The profits of the meetings is used to give out Research Grants and prizes (e.g. prize for best abstract and Ulmsten prize for the most promising young scientist).

The meeting attendees will predominantly be gynaecologists and urogynecologists treating female patients with urinary incontinence and pelvic organ prolapse on a daily basis, but we also expect a number of urologists, general practitioners, continence nurses, and other allied health workers from Denmark, Finland, Iceland, Norway and Sweden.

Topics of this meeting will include: diagnosis, conservative, pharmacological and surgical treatment of urinary incontinence and pelvic organ prolapse, as well as related aspects of pelvic floor function and dysfunction. New original research will be presented including relevant dissertations and submitted abstracts.

NUGA Board:

Rune Svenningsen (NO) MD, PhD
Mette Hornum Bing (DK) MD, PhD
Kristin Jonsdottir (IS) MD
Kirsi Kuismanen (FI) MD, PhD
Riffat Cheema (SE) MD, PhD

Conference venue
Scandic Traingeln, Triangeln 2, Norr, 20010 Malmø, Sweden

Conference website
www.nuga-meeting.com

Registration desk opening hours
Thursday from 18.00 to 20.00
Friday from 07.30 to 16.00
Saturday from 08.00 to 16.00

Lectures
All lectures are taking place in the meeting room "Ballroom"

Wi-Fi access
Wi-Fi Network name: Scandic Easy
No password

Lunch and refreshments
Lunch and coffee servings are included in the registration fees and served during the conference period in the exhibition area. The serving time can be found in the detailed program

Badges
Name badge is required for accessing lectures, lunch and coffee servings, exhibition area and social events. Please wear your name badge throughout the conference.

City information
https://www.visitsweden.com

Emergency contacts
The Meeting Planners: + 45 60217421
Emergency: Tel 112

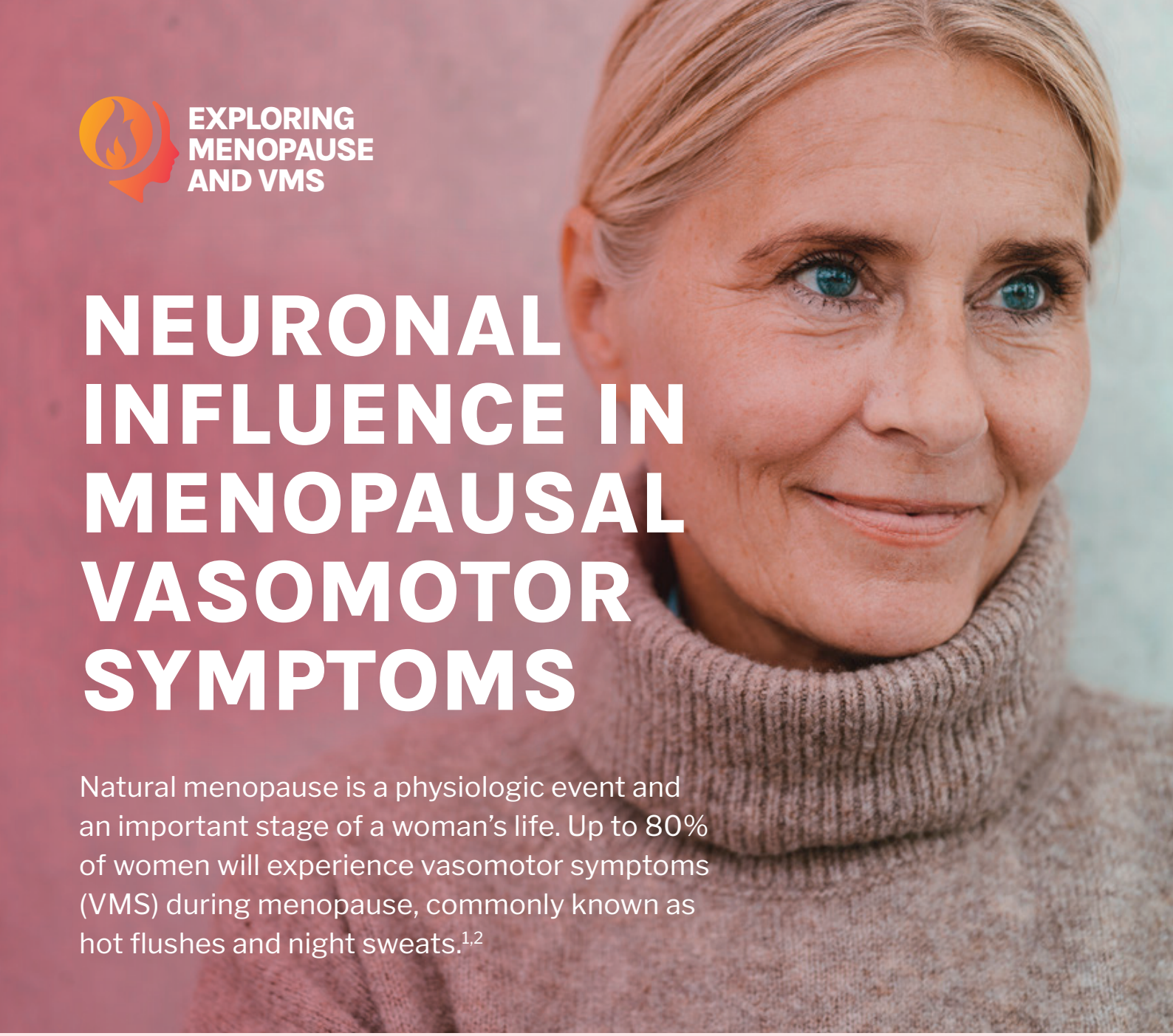
Conference agency
The Meeting Planners
reg@meetingplanners.dk
Telephone: +45 6021 7421

Thursday, Optional Dinner
Date/Time: 1 February, 20:00
Address: KOL & Cocktails Malmö, Kalendegatan 16, 211 35 Malmö
Badge: Please remember to bring your conference name badge

Conference Dinner at conference venue
Date/Time: 2 February, 19:00
Address: NUGA conference venue banquet room
Badge: Please remember to bring your conference name badge

Pre-registration for social events is required. Please sign up through the registration site or check with the registration desk staff if you have not signed up in advance.

The social program is not supported by the industry



EXPLORING MENOPAUSE AND VMS

NEURONAL INFLUENCE IN MENOPAUSAL VASOMOTOR SYMPTOMS

Natural menopause is a physiologic event and an important stage of a woman's life. Up to 80% of women will experience vasomotor symptoms (VMS) during menopause, commonly known as hot flushes and night sweats.[1,2]

VISIT US IN THE ASTELLAS STAND AND FIND OUT MORE ABOUT HOW THERMOREGULATORY HOMEOSTASIS IS ALTERED DURING MENOPAUSE[3-6]

References: 1. Santoro NF. Menopause. In: Crandall CJ, Bachman GA, Faubion SS, et al., eds. Menopause Practice: A Clinician's Guide. 6th ed. Pepper Pike, OH: The North American Menopause Society, 2019:1-21. **2.** Thurston RC. Vasomotor symptoms. In: Crandall CJ, Bachman GA, Faubion SS, et al., eds. Menopause Practice: A Clinician's Guide. 6th ed. Pepper Pike, OH: The North American Menopause Society, 2019:43-55. **3.** Mittelman-Smith MA, Williams H, Krajewski- Hall SJ, et al. Role for kisspeptin/neurokinin B/dynorphin (KNDy) neurons in cutaneous vasodilation and the estrogen modulation of body temperature. Proc Natl Acad Sci U S A. 2012;109(48):19846-51. **4.** Padilla SL, Johnson CW, Barker FD, et al. A neural circuit underlying the generation of hot flushes. Cell Rep. 2018;24(2):271-277. **5.** Krajewski-Hall SJ, Blackmore EM, McMinn JR, Rance NE. Estradiol alters body temperature regulation in the female mouse. Temperature. 2018;5(1):56-69. **6.** Krajewski- Hall SJ, Miranda Dos Santos F, McMullen NT, et al. Glutamatergic neurokinin 3 receptor neurons in the median preoptic nucleus modulate heat-defense pathways in female mice. Endocrinology. 2019;160(4):803-816.

MAT-SE-NON-2023-00097 | Date of preparation: 15.11.2023

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07.30-08.20	Registration
08.20-08.30	Welcome by Congress President Riffat Cheema

Chair: Rune Svenningsen (NO) and Riffat Cheema (SE)
Imaging of the pelvic floor

08.30-09.00	**MRI Imaging for pelvic floor disorders** Paul Aughwane (UK)
09.00-09.30	**Pelvic Floor Ultrasound for pelvic floor disorders** Ligita Jokubkiene (SE)
09.30 - 09.40	**Discussion**
09.40-10.00	**Coffee break in exhibition area**

Chair: Kristin Jonsdottir (IS) and Rune Svenningsen (NO)
Imaging before mesh removal and tape removal

10.00-10.30	**The role of MRI 15 min** Paul Aughwane (UK) **The role of 3D UL 15 min** Riffat Cheema (SE)
10.30-11.00	**3 Cases with mesh complications (2 on slings and 1 on POP meshes)** *Sling complication nr 1.* Niels Klarskov (DK) *Sling complication nr 2.* Riffat Cheema (SE) *Prolapse Mesh complication.* Camilla Isaksson (FI)
11.00-11.20	**Round table discussion**
11.20-11.50	**Coffee break in exhibition area**

Chair: Mette Hornum Bing (DK) and Kirsi Kuismanen (FI)
Dissertations (10+5 minutes each)

11.50-12.30	**Female Pelvic Floor Disorders – Clinical aspects on Surgical Treatments** Ida Bergman (SE) **Pelvic floor dysfunction after childbirth: symptoms, diagnosis, treatment** Emilia Rotstein (SE)
12.30-14.00	**Standing lunch in exhibition area** **Lunch meeting for the Nordic Urogynecology Registries (special invite only) Room: Learning 2**
13.00-13.45	**Lunch symposium in the plenary room held by Astellas (Gold Sponsor+)** Menopausal vasomotor symptoms and the treatment landscape anno 2024 Speaker: Dr. Pernille Ravn (DK) (Please note, that the symposium is being video recorded)

Chair: Kristin Jonsdottir (IS) and Riffat Cheema (SE)
Abstract session (5+3 minutes each)

14.00-15.00

ID 22: Are stress and urgency urinary incontinence associated with levator ani muscle avulsions, muscle contraction or TVT-location after surgery?
Berit Rein Solhaug (NO)

ID 21: Are voiding difficulties associated with tape location 10-20 years after tension free vaginal tape (TVT) surgery?
Berit Rein Solhaug (NO)

ID 30: Case series of successful removal of tension-free vaginal tape.
Despina Flondell Sité (SE)

ID 27: Dorsal Genital Nerve stimulation in patients with overactive bladder. First clinical results with the UCon neurotrstimulator.
Meryam El Issaoui (DK)

ID 24: The FAST study: The Follow-up After Shorter Tapes Study; a registry study from the Norwegian Female Incontinence Registry (NFIR).
Kjersti Rimstad (NO)

ID 23: Tension-Free Vaginal Tape and Polyacrylamide Hydrogel-Injection for Primary Stress Urinary Incontinence in Women: 5-Year Follow-Up from A Randomized Clinical Trial. Anna-Maija Itkonen Freitas (FI)

ID 15: Tension-free vaginal tape versus polyacrylamide hydrogel: patient choice and treatment outcomes.
Lotta Särkilahti (FI)

2 dissertations 10 + 5 min

15.00-15.30

Surgical treatment of apical prolapse. Nationwide cohort studies evaluating native tissue operations
Karen Husby (DK)

The long-term effects of obstetrical anal sphincter injury on pelvic floor function
Ida K Nilsson (SE)

15.30-15.50 **Coffee break in exhibition area**

Chair: Riffat Cheema (SE) and Mette Bing (DK)
Bulkamid injection – what can the Nordic registries tell us, indications, results (subjective and objective):

15.50-16.05 **NFIR Registry**
Rune Svenningsen (NO)

16.05-16.20 **GynOp registry**
Stefan Zaccharias (SE)

16.20-16.35 **DugaBase**
Niels Klarskov (DK)

16.35-16.50 **Discussion.** Who should be offered Bulkamid? Patient choice or indication

16.50-17.20 **"25 years of prolapse surgery. A winding path to success"**
Jonas Gunnarsson (SE)

19.00 **Dinner at the venue. Dress code: Casual**

08.00-09.00 Registration

Chair: Kristin Jonsdottir (IS) and Kirsi Kuismanen (FI)
Abstract session (5+3 minutes each)

09.00-10.00

ID 26: A follow-up study of reoperations due to recurrent prolapse and SUI after native tissue, transvaginal- and abdominal mesh surgery.
Olga Wihersaari (FI)

ID18: Are patients less satisfied and are there more complications after recurrent than primary prolapse surgery? – a registry-based study.
Liv Hjartsjø (NO)

ID 19: Choice of surgery and anesthesia, complications, and satisfaction over time – a registry-based study of pelvic organ prolapse surgery.
Liv Hjartsjø (NO)

ID 9: Childbirth-related deviations in the perineal anatomy assessed by three-dimensional endovaginal and endoanal ultrasound – a reliability study.
Hanne Sether Lilleberg (NO)

ID 25: Comparison of bilateral sacrospinous fixation and vaginal polypropylene mesh for apical prolapse; a national register-based study.
Riffat Cheema (SE)

ID 5: Information required for valid generalizable, and useful individual prediction models for obstetric anal sphincter injury in high-and low-risk birth scenarios.
Jennie Larsudd-Kåverud (SE)

ID 2: Efficacy and safety of fezolinetant for the treatment of moderate-to-severe vasomotor symptoms associated with menopause in women considered unsuitable for hormone therapy: the phase 3b DAYLIGHT study.
Angelica Lindén Hirschberg (SE)

10.00-10.20 **Coffee break in exhibition area**

Chair: Mette Hornum Bing (DK) and Riffat Cheema (SE)
Prevention of pelvic floor dysfunction

10.20-10.50 **Pelvic floor dysfunction: The role of birth injuries – can it be prevented?**
Ian Milsom (SE) and Marie Gyhagen (SE)

10.50-11.10 **What is the evidence of Pelvic floor exercise in long-term prevention of pelvic floor dysfunction?**
Ulla Due (DK)

11.10-11.50 **What is the role of obstructed defecation in the development for pelvic floor dysfunction? – prevention of POP and incontinence**

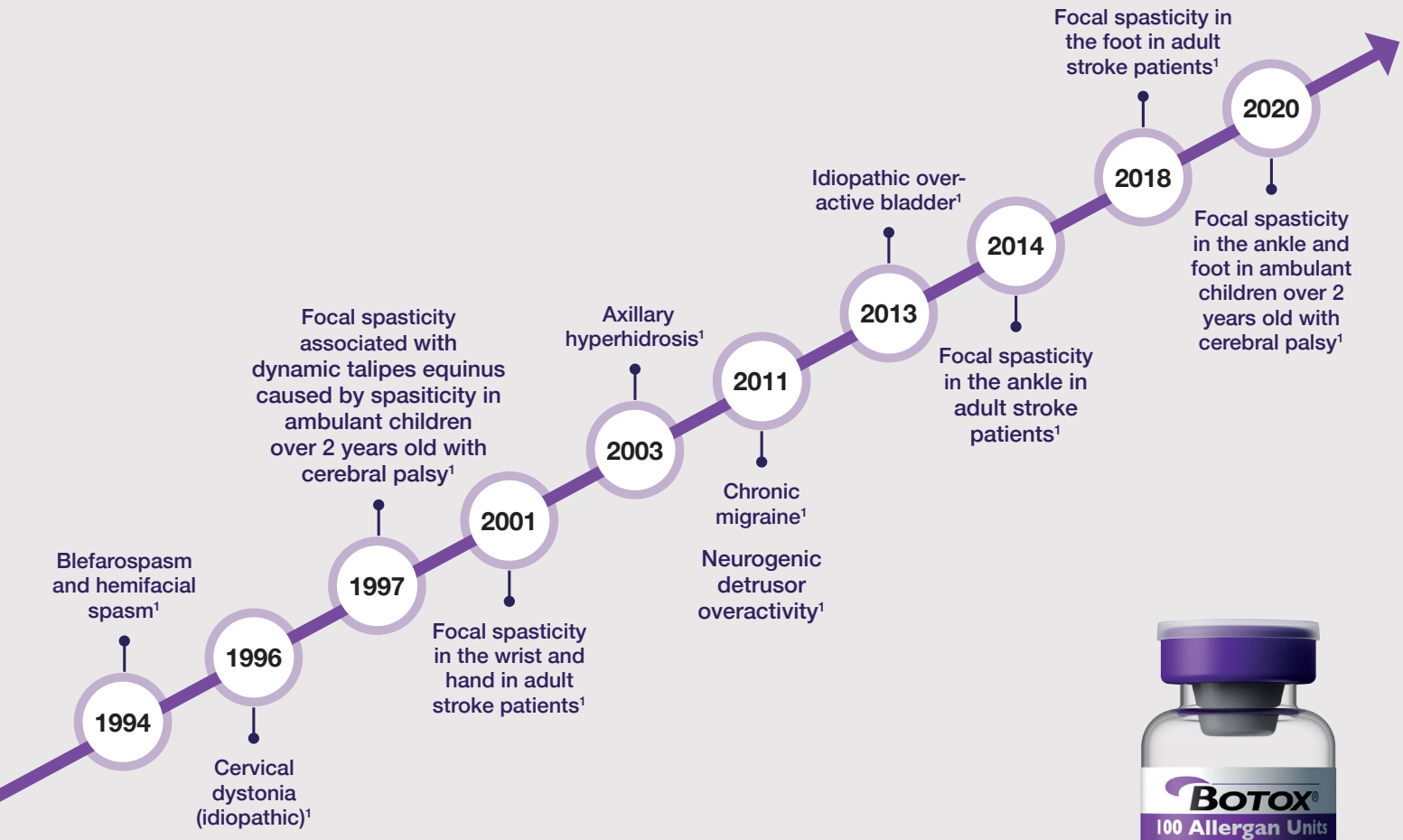
11.10-11.30 **The Clinical perspective.**
Mari Dahlberg (SE)

11.30-11.50 **What is the scientific evidence?**
Johanna Mäkelä-Kaikkonen (FI)

11.50-12.00 **Discussion**

12.00-12.20 **Coffee break in exhibition area**

BOTOX (Botulinum Toxin Type A)
UNDER CONTINUOUS DEVELOPMENT



Please refer to the Botox SPC for full product information and approved indications

References: 1. Summary of Product Characteristics Botox, 26.04.2022

BOTOX® (*Botulinumtoxin typ A*). Övriga muskelavslappande medel, perifert verkande (**ATC: M03AX01**), pulver till injektionsvätska, lösning 50 E (Rx, EF), 100 E (Rx, Ff), 200 E (Rx, Ff). Enheter av botulinumtoxin är inte utbytbara mellan olika produkter. **Indikationer:** *Neurologiska störningar:* Symptomatisk behandling av följande neurologiska störningar. Fokal spasticitet i fotleden och foten hos ambulanta pediatriska patienter över 2 års ålder med cerebral pares, som ett tillägg till rehabiliteringsbehandling. Fokal spasticitet i handled och hand samt i fotled och fot hos vuxna patienter efter stroke. Blefarospasm, hemifacial spasm och associerade fokala dystonier. Cervikal dystoni (spastisk torticollis). Symtomlindring hos vuxna som uppfyller kriterierna för kronisk migrän (huvudvärk ≥ 15 dagar per månad av vilka minst 8 är dagar med migrän), hos patienter som har svarat otillräckligt eller är intoleranta mot profylaktiska migränläkemedel. *Blåsstörningar:* Idiopatisk överaktiv urinblåsa med symtom på urininkontinens, trängningar och täta blåstömningar hos vuxna patienter med otillräckligt svar på, eller är intoleranta mot antikolinergiskt läkemedel. Urininkontinens hos vuxna med neurogen överaktiv detrusor på grund av stabil subcervikal ryggmärgsskada eller multipel skleros. *Axillär hyperhidros:* Ständiga besvär av svår primär hyperhidros i axillerna, som försvårar dagliga aktiviteter, och som är resistent mot lokal behandling. **Kontraindikationer:** Känd överkänslighet mot botulinumtoxin typ A eller något hjälpämne eller infektion vid det planerade injektionsstället. Botox-behandling för blåsstörningar är även kontraindicerat hos patienter som har urinvägsinfektion vid tidpunkten för behandling eller som vid tidpunkten för behandling har akut urinretention, som inte rutinmässigt kateteriseras eller hos patienter som inte vill och/eller kan initiera kateterisering efter behandling vid behov. **Varningar och försiktighet:** För att underlätta spårbarhet av biologiska läkemedel ska läkemedlets namn och tillverkningssatsnummer dokumenteras. Botox ska bara administreras av läkare med speciell kompetens och kunskap om behandlingen. Rekommenderade doser och administrerings-frekvenser ska inte överskridas. Initial dosering av behandlingsnaiva patienter skall börja med den lägsta rekommenderade dosen för den specifika indikationen. Biverkningar kan uppstå trots att tidigare injektioner har tolererats väl. Biverkningar relaterade till spridning av toxin från injektionsstället har rapporterats. Patienter som behandlas med terapeutiska doser kan uppleva överdriven muskelsvaghet. Hänsyn bör tas till nytta-riskkonsekvenserna för den enskilda patienten innan behandling med Botox påbörjas. Dysfagi har rapporterats efter injektion i andra ställen än i cervikala muskulaturen. Botox bör endast ges med extrem försiktighet och under noggrann övervakning till patienter med subkliniska eller kliniska tecken på nedsatt neuromuskulär transmission, till patienter med perifera motoriska neuropatiska sjukdomar och till patienter med underliggande neurologiska sjukdomar. Patienter med en sjukdomshistoria med dysfagi och aspiration skall behandlas med yttersta försiktighet. Patienter eller vårdgivare skall rådas att omedelbart söka läkarvård om sväljnings-, tal- eller andningssvårigheter uppträder. Den aktuella anatomin och varje ändring av anatomin på grund av tidigare kirurgiska ingrepp måste vara kända före administrering. Försiktighet bör iakttas vid injicering nära lungan eller andra känsliga anatomiska strukturer eller på ett ställe med pågående inflammation. Allvarliga biverkningar innefattande dödlig utgång har rapporterats för patienter som hade fått injektioner av Botox utanför godkänd indikation direkt i spottkörtlar, den orolinguala-faryngeala regionen, matstrupen och magsäcken. Procedurrelaterade skador kan uppstå. Extrem försiktighet bör iakttas vid behandling av barn som har betydande neurologisk svaghet, dysfagi, eller nyligen har haft aspirationspneumoni eller lungsjukdom. Män med överaktiv blåsa och tecken eller symtom på urinvägsobstruktion ska inte behandlas med Botox. Botox kan orsaka asteni, muskelsvaghet, yrsel och synstörningar vilket kan påverka körförmågan och användning av maskiner. Fertilitet, graviditet och amning: Ska inte användas under graviditet och till kvinnor i fertil ålder som inte använder preventivmedel om inte särskilda skäl föreligger. Användning under amningsperioden kan inte rekommenderas. Särskilda förvaringsanvisningar: Förvaras i kylskåp (2–8 °C) eller i djupfryst tillstånd (-5 °C till -20 °C). För ytterligare information om produkten och senaste prisuppgifter se www.fass.se. Datum för översyn av produktresumén: 2022-04-26. AbbVie AB, Box 1523, 171 29 Solna, +46 (0)8 684 44 600, info@abbvie.se.

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SE-BTX-220025_v1, Augusti 2022

Chair: Kirsi Kuismanen (FI) and Rune Svenningsen (NO)
Abstract session (5+3 minutes each)

12.20-13.20

ID 20: Is the Manchester procedure better than isolated anterior colporrhaphy for urinary incontinence patient satisfaction and complications? – a registry-based study.
Liv Hjartsjø (NO)

ID 29: Prevalence of persistent defects in anal sphincters in women with grade 3-4 perineal tears.
Leah Besjakov (SE)

ID 8: Recurrent pelvic organ prolapse after hysterectomy – A 10-year national follow-up study.
Tea Kuittinen (FI)

ID 3: Risk of Thrombosis and Bleeding in Gynecologic Non-Cancer Surgery: Series of Systematic Reviews and Meta-Analyses.
Riikka Tähtinen (FI)

ID 17: The PLUS study: Vicryl® versus VicrylPlus® for Primary Suturing of Perineal Tears after Delivery. A Randomized Controlled Trial.
Kristine Sonnichsen (SE)

ID 10: Translation and validation of ICIQ-B in Danish pelvic floor disorder patients.
Ulla Due (DK)

ID 14: Validation of Clavien-Dindo classification of complications after reconstructive pelvic floor surgery.
Jennifer Campbell (SE)

13.20-14.45	**Standing lunch in exhibition area**
13.35-14.20	**Lunch symposium held by Axonics (Platinum Sponsor)** Topic: Bulkamid in the Ambulatory Setting – Experience and Best Practice Speakers: Professor Niels Klarskov, Copenhagen University Hospital, Herlev (DK) Professor Ingrid Volløyhaug, St.Olav University Hospital Trondheim (NO)

Chair: Rune Svenningsen (NO) and Kristin Johnasdottir (IS)

14.45-15.15	**Apical support – how to do a good midcompartment reconstruction.** *Apical support without the uterus - 15 min.* Dorte Teilmann Jørgensen (DK) *Apical support with the uterus - 15 min.* Karen Ruben Husby (DK)
15.15-15.45	**Why my method?** (pros and cons) *Manchester procedure - 5 min.* Sissel Oversand (NO) *Laparoscopic sakrokolpopexi - 5 min.* Mette Bing (DK) *Vaginal sacrospinosus ligament fixation - 5 min.* Edward Marcos (SE) *Transvaginale mesh still in use in Sweden - 5 min.* Riffat Cheema (SE)
15.45-16.00	**Discussion**
16.00-16.20	**Coffee break in exhibition area**

Chair: Kirsi Kuismanen (FI)

16.20-16.50	**Refining surgical choices in patients at risk for mesh complications** Cathrine Matthew (Zoom)
16.50-17.00	**Closing and NUGA Awards**

MAT-SE-BET-2023-00048 12.2023 exp. 03.2024

Betmiga™
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BETMIGA™ (mirabegron) 25 and 50 mg prolonged-release tablets

Pharmacotherapeutic group: Urologicals, urinary antispasmodics (G04BD12).

Therapeutic indications: Symptomatic treatment of urgency, increased micturition frequency and/or urgency incontinence as may occur in adult patients with overactive bladder (OAB) syndrome.

***Posology and administration:** *For adults (≥ 18 years and elderly):* 50 mg once daily. For patients with severe renal impairment (GFR 15 to 29 mL/min/1.73 m²) or with moderate hepatic impairment (Child-Pugh Class B), a dose reduction to 25 mg is recommended. To be taken with liquids, swallowed whole and is not to be chewed, divided, or crushed, and may be taken with or without food.

Contraindications: Hypersensitivity to the active substance(s) or to any of the excipients.

Severe uncontrolled hypertension defined as systolic blood pressure ≥ 180 mm Hg and/or diastolic blood pressure ≥ 110 mm Hg.

***Special warnings and precautions for use:** *Renal and hepatic impairment:* Betmiga has not been studied in patients with end stage renal disease (GFR < 15 mL/min/1.73 m² or patients requiring haemodialysis) or severe hepatic impairment (Child-Pugh Class C) and it is therefore not recommended for use in these patient populations. Betmiga is not recommended for use in patients with severe renal impairment (GFR 15 to 29 mL/min/1.73 m²) concomitantly receiving strong CYP3A inhibitors. Betmiga is not recommended for use in patients with moderate hepatic impairment (Child-Pugh B) concomitantly receiving strong CYP3A inhibitors. *Hypertension:* Can increase blood pressure. Blood pressure should be measured at baseline and periodically during treatment, especially in hypertensive patients. Administer with *caution to patients with congenital or acquired QT prolongation, patients with clinically significant bladder outlet obstruction and patients on antimuscarinic treatment of OAB. Pregnancy, lactation and fertility:* Is not recommended in women of childbearing potential not using contraception, nor during pregnancy or breast feeding. The effect of mirabegron on human fertility has not been established.

***Undesirable effects:** The most common (< 10 %) adverse drug reactions (ADRs) are tachycardia, urinary tract infection, headache, dizziness, nausea, constipation and diarrhoea. Cases (< 1 %) of rash, increased liver enzymes and oedemas have been reported. Insomnia and confusional state have been reported at an unknown frequency.

Marketing authorisation holder: Astellas Pharma Europe B.V., The Netherlands.

Country specific information

Sweden: Reporting of suspected ADRs: Läkemedelsverket, Box 26, 751 03 Uppsala, website: www.lakemedelsverket.se. **Status of the product:** Rx. **Reimbursement:** Only reimbursed for patients that have tried but cannot tolerate antimuscarinic pharmaceuticals. **Local representative:** Astellas Pharma AB, Tel: +46 (0)40 650 15 00. For more information, pack size and price see www.fass.se.

Based on the authorised summary of product characteristics (SmPC) dated 08 October 2021.

*The section has been rewritten and/or abbreviated compared to the authorised SmPC.

The SmPC can be ordered free of charge from the local representative.

Astellas Pharma AB | Box 21046 | 200 21 Malmö, Sweden | Phone +46 40 650 1500 | www.astellas.com/se

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ID 2

Efficacy and safety of fezolinetant for the treatment of moderate-to-severe vasomotor symptoms associated with menopause in women considered unsuitable for hormone therapy: the phase 3b DAYLIGHT study

Presentation method: Oral presentation

Angelica Lindén Hirschberg[1] **(SE)** Katrin Schaudig[2], Xuegong Wang[3], Céline Bouchard[4], Antonio Cano[5], Marla Shapiro[6], Petra Stute[7], Weizhong He[8], Kentaro Miyazaki[9], Ludmilla Scrine[10], Rosella Nappir[11,12]

[1]Karolinska Institutet and Karolinska University Hospital, Stockholm, Sweden,
[2]Hormone Hamburg, Hamburg, Germany,
[3]Astellas Pharma Global Development, Northbrook, IL, USA,
[4]Clinique de Recherche en Santé de la Femme, Quebec City, Canada,
[5]University of Valencia, Valencia, Spain,
[6]University of Toronto, Toronto, ON, Canada,
[7]Inselspital, Bern, Switzerland,
[8]Astellas Pharma Global Development, Northbrook, IL,
[9]Astellas Pharma Inc., Tokyo,
[10]Astellas Pharma Europe Ltd, Addlestone,
[11]Research Center for Reproductive Medicine and Gynecological Endocrinology – Menopause Unit, Fondazione Policlinico IRCCS S. Matteo, Pavia, Italy,
[12]Department of Clinical, Surgical, Diagnostic and Pediatric Sciences, University of Pavia, Pavia, Italy

Background

Hormone therapy (HT) is an effective treatment for vasomotor symptoms (VMS) associated with menopause, but HT is not always suitable. Fezolinetant is a nonhormonal, selective neurokinin 3 receptor antagonist that is approved in the US for the treatment of moderate-to-severe VMS due to menopause.

Materials and methods

DAYLIGHT (NCT05033886) was a phase 3b study to assess the efficacy and safety of fezolinetant for the treatment of moderate-to-severe VMS associated with menopause in women considered unsuitable for HT. Unsuitability was defined as: contraindications, caution (medical history), stoppers (lack of efficacy, side effects, or medical advice), or averse (informed choice not to take HT). Women (≥40–≤65 years) were randomised 1:1 to placebo:fezolinetant 45mg, and VMS were recorded daily using an electronic diary. The primary endpoint was mean change in daily frequency of moderate-to-severe VMS from baseline to Week 24. Mean change in VMS severity and safety were also assessed.

Results

Overall, 453 women were enrolled (placebo n=226; fezolinetant n=227), including HT contraindicated (51, 11%), caution (165, 36%), stoppers (69, 15%), and averse (168, 37%). At 24 weeks, fezolinetant significantly reduced VMS frequency (least squares [LS] mean difference: –1.93; 95% confidence interval [CI] –2.64, –1.22; p<0.001) and VMS severity (LS: –0.39; 95% CI –0.57, –0.21; p<0.001) vs placebo. Similar incidences of treatment-emergent adverse events (TEAEs; placebo: 61.1%, fezolinetant: 65.0%) and serious TEAEs (3.5%, 4.4%) were observed.

Conclusions

The phase 3b DAYLIGHT study showed that fezolinetant 45mg was efficacious and well tolerated for moderate-to-severe VMS in women considered unsuitable for HT.

Reference 1

This study was funded by Astellas Pharma Inc. Medical writing support was provided by Dorothy Keine and Michael Parsons from Envision Pharma, Inc. and funded by the study sponsor.

ID 3

Risk of Thrombosis and Bleeding in Gynecologic Non-Cancer Surgery: Series of Systematic Reviews and Meta-Analyses

Presentation method: Oral presentation

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Background

Pharmacological thromboprophylaxis involves balancing lower risk of venous thromboembolism (VTE) against higher risk of bleeding, a trade-off that critically depends on the baseline risks of VTE and bleeding (in the absence of thromboprophylaxis).

Materials and methods

We conducted comprehensive searches on Embase, MEDLINE, Web of Science, and Google Scholar. We identified observational studies enrolling ³50 adult patients undergoing gynecologic non-cancer surgery procedures reporting risks for symptomatic VTE or major bleeding (bleeding leading to reintervention, transfusion, post-operative hemoglobin <70 g/L). Separately for each procedure, we adjusted the reported risk estimates for thromboprophylaxis and length of follow-up to determine cumulative baseline incidence at 4 weeks post-surgery. We stratified VTE risks by patient-related risk factors and used the GRADE approach to rate evidence certainty.

Results

We identified 131 articles, reporting on 50 gynecologic non-cancer surgery procedures. The evidence certainty was generally low. VTE risk was <0.5% in 30 (60%) procedures, 0.5-1.0% in 10 (20%), and >1.0% in 10 (20%) procedures. The risk of symptomatic VTE varied between procedures and patient risk factors, from median of <0.1% (i.e., transvaginal oocyte retrieval) to median of 2.6% in uterosacral ligament suspension (2.1-8.5% across risk groups). The risk of bleeding requiring reintervention varied between <0.1% (transvaginal oocyte retrieval) and 4.0% (open myomectomy)

Conclusions

The risks of VTE and bleeding vary substantially between approaches and procedures in gynecologic non-cancer surgery. VTE reduction with pharmacological thromboprophylaxis outweighs increase in bleeding in some procedures, whereas the opposite is true in others. In many procedures, thromboprophylaxis reduces VTE risk trivially.

ID 5

Information required for valid, generalizable, and useful individual prediction models for obstetric anal sphincterinjury in high- and low-risk birth scenarios

Presentation method: Oral presentation

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Background

Obstetric anal sphincter injuries (OASIs) contribute to the long-term prevalence, severity, and impact of anal incontinence. Currently, there is no reliable and generalisable prediction model to calculate the individual risk of OASI accurately. The aim was to develop prediction models for the probability of OASI in various risk scenarios, determine the contribution of relevant predictors, and construct an online interactive risk calculator for personal, clinical, and educational use.

Materials and methods

The Swedish Medical Birth Register was the data source: births n=609,916, OASIs n=25,245, study period 2009-2018 (1). There were three risk scenarios: 1) first vaginal delivery in primipara (n=332,457, incidence of OASI 6%), 2) first vaginal delivery after one prior cesarean delivery (n=22,829, OASI 11%), and 3) second vaginal delivery in two-para (n=254,630, OASI 2%). Multiple logistic regression with backward elimination was used with minimisation of Bayesian Information Criteria (BIC) to select predictors. We determined the relative contribution of each predictor of the final models using Pseudo R^2.

Results

Infant birth weight was the overall dominant predictor, accounting for 30-45% of the total predictive capacity of the models (Figure). The absence of information on infant birth weight and obstetric events significantly decreased the accuracy and usefulness of the models.

Conclusions

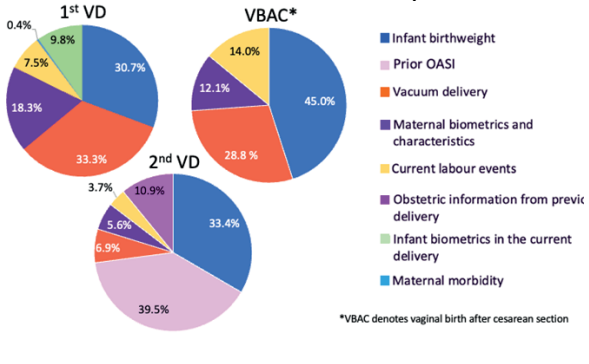
The findings of this study support the use of ultrasound and MRI to assess fetal biometrics antenatally (2). The online calculator at www.sphinctercalc.com provides clinical guidance for obstetricians and midwives while supporting women's autonomous decision-making.

Reference 1

Cnattingius S, Källén K, Sandström A, et al. The Swedish medical birth register during five decades: documentation of the content and quality of the register. Eur J Epidemiol 2023;38:109-20.

Reference 2

Kadji C, Cannie MM, Kang X, Carlin A, Benjou Etchoua S, Resta S, Dütemeyer V, Abi-Khalil F, Mazzone E, Bevilacqua E, Jani JC. Fetal magnetic resonance imaging at 36 weeks predicts neonatal macrosomia: the PREMACRO study. Am J Obstet Gynecol. 2022 Feb;226(2):238.e1-238.e12.



ID 6

Effectiveness of a novel Urogynecology service at Al Wakra Hospital, Qatar

Presentation method: Poster presentation

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Background

Urogynecology dysfunction occasioned by pelvic floor disorders include urinary incontinence and prolapse of several compartments of the female pelvic organs.

In a Swedish study, Pelvic floor disorders affect 46 % of women, and a third of the subjects had two or more disorders 1.

The Urogynecology service was established at Al Wakra Hospital in 2020 to address service needs.

Materials and methods

The medical records of all patients seen at the Urogynecology clinic since its inception in November 2020 to 31st September 2023 were reviewed for data to assess quality trends in service provision.

Results

A total of 2,438 patients were seen over a 3-year period despite Covid restrictions. Referral to the service grew from 37 patients in 2020 to a high of 353 patients in 2022.

A total of 156 urogynecology procedures including vaginal surgeries, robotics and laparoscopy were completed with excellent outcomes. There was no report of any major complications. Average length of stay was 2 days.

Referrals to allied teams of urodynamics and physiotherapy demonstrated collaboration and steady growth over the review period. Intensive staff training was completed. Overall patient feedback has rated the service as excellent.

Conclusions

The urogynecology service at Al Wakra hospital has grown to deliver high quality, safe outcomes for our patients. Planned future development in services provision will continually enhance patient experiences.

Reference

Hallock JL, Handa VL. 2016.The epidemiology of pelvic floor disorders and childbirth: an update. Obstet Gynecol Clin North Am.43 (1): 1-13.

ID 7

(HEAL) Dehisced perineal tear after vaginal labour – conservative treatment or resuturing

Presentation method: Poster presentation

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Background

With more than 90% of primiparous women sustaining an injury to the labia, vagina, or perineum during childbirth perineal repair is the most common surgical procedure in women after spontaneous obstetric tears or episiotomies. About 25% of the women with a second-degree perineal tear sustain perineal wound dehiscence. Perineal wound dehiscence can lead to severe consequences for the woman, the baby, and the family. However, there is limited knowledge of how the wounds heal, and therefore clinical practice varies widely between individual practitioners and hospitals.

Materials and methods

The study is a prospective cohort study at four hospital clinics within the Capital Region of Denmark. A total of 300 women with a second-degree perineal tear (100 with uncomplicated healing process, 100 with dehisced perineal tear and conservative treatment, 100 with dehisced perineal tear and resuturing). Women with a vaginal delivery, who have had a primary repair of a second-degree perineal tear or episiotomy will be included. Follow-up and data collection by two clinical examinations and web-based questionnaires will be one month, three months, and 9-12 months post-partum.

Results

We are still recruiting for the study, and therefore the results are not ready

Conclusions

This is the first Danish study to describe the consequences of dehisced perineal tears treated with conservative treatment or resuturing. The knowledge from our results will pave the way for knowledge of dehisced perineal second-degree tears and will improve the quality of treatment and counseling of the woman and their partners.

ID 8

Recurrent pelvic organ prolapse after hysterectomy - A 10-year national follow-up study

Presentation method: Oral presentation

Tea Kuittinen (FI), Päivi Rahkola-Soisalo, Maarit Mentula, Päivi Härkki, Sari Tulokas

Introduction

Hysterectomy is a risk factor for pelvic organ prolapse (POP). We assessed the risk of POP (re-operations, visits, patient and operation related factors) after hysterectomy among women with previous POP.

Material and Methods

This retrospective cohort study included 1697 women having hysterectomy due to POP during 2006 or POP diagnosis within ten years before hysterectomy (FINHYST 2006 cohort). Follow-up was until the end of 2016. The data was derived from the Finnish National Care register and linked to the FINHYST 2006 cohort. Hysterectomy approaches and other demographics were compared to the risk of a prolapse diagnosis and/or surgery. Cox regression model was used to identify hazard ratios (HR).

Results

A total of 280 women (16.5%) had a POP re-operation and 359 (21.2%) outpatient visit due to POP. Vaginal vault prolapse repair was the most common POP re-operation (n= 181, 10.7%), followed by anterior wall repair (n=120, 7.1%). Visits due to POP were due to cystocele (n 204; 12%), vaginal vault prolapse (n 186; 11%) or rectocele (112 (6,6%). Hysterectomy approach did not affect on re-operations or visits, whereas previous cesarean section and concomitant anterior repair were associated with decreased risk of anterior/vault re-operations. A concomitant sacrospinous fixation (SSF) surgery increased risk for anterior/vault re-operations. Over 500g uterus increased the risk for visits for posterior prolapse 5-fold.

Conclusions

Prolapse

Approximately one out of five women suffering from POP ensue POP re-operation or visit after hysterectomy. The rates are independent on hysterectomy approach but indicate that hysterectomy may worsen known pelvic floor dysfunction.

ID 9

Childbirth-related deviations in the perineal anatomy assessed by three-dimensional endovaginal and endoanal ultrasound – a reliability study

Presentation method: Oral presentation

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Background

Perineal lacerations affecting the perineal muscles are a common birth trauma. Despite these muscles' important role in normal pelvic floor function, childbirth-related deviations in this area have received little attention. The aim of this study is to assess the intra- and inter-rater reliability of deviations in the perineal muscles using three-dimensional (3D) endovaginal and endoanal ultrasound one year postpartum.

Materials and methods

40 primiparous were included. Endovaginal and endoanal ultrasound was performed using BK-5000 (BK Medical Systems) with a 3D transducer (type 9038) one year postpartum. The muscles superficial transverse perinei, puboperinealis, and puboanalis were identified at the level where they attach to the perineal body. Deviations of these muscles were defined as muscle discontinuity right, left, or centrally, or muscles not being visible. The volumes were analyzed offline two times at least two weeks apart by one investigator for intrarater reliability, and one time by a second investigator for interrater reliability. Reliability was calculated using Cohen's kappa.

Results

The percentage agreement for deviations in the perineal muscles ranged between 90% and 100% for the endovaginal ultrasound, and between 92% and 97% for the endoanal ultrasound. In the endovaginal ultrasound, kappa values for intrarater reliability were good for puboperinealis and excellent for the other muscles. The interrater reliability was excellent for all muscles in both modalities, except kappa values for puboanalis in the endovaginal volumes which was considered good.

Conclusion

3D endovaginal and endoanal ultrasound are reliable methods to identify deviations in the perineal muscles one year after birth.

ID 10

Translation and validation of ICIQ-B in Danish pelvic floor disorder patients

Presentation method: Oral presentation

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Background

The International Consultation on Incontinence Questionnaire-Bowel (ICIQ-B) contains 21 items of which 17 are scored in three subscales: Bowel pattern, Bowel control and Quality-of-life.
Aim of this study was to translate the ICIQ-B into Danish and to validate the Danish version in pelvic floor disorder (PFD) patients with and without anal incontinence (AI).

Material and Methods

The ICIQ-B was translated by a panel followed by 30 cognitive interviews (M8/F22) with PFD-patients. Test-retest of the ICIQ-B was completed online (REDCap) together with the St. Marks score.
Content validity; structural validity; convergent validity and discriminant validity was assessed followed by evaluation of relative and absolute reliability including smallest real difference (SRD).

Results

After three revisions the Danish ICIQ-B was well accepted except for lack of items addressing psychological impact.

The ICIQ-B was entered by 238 (M57/F181) and completed by 227, the St. Marks score by 221. Significantly higher ICIQ-B and St. Marks scores were found in AI-patients. Structural validity of the bowel pattern subscale could not be retrieved. ICIQ-B scores correlated moderately with St. Marks scores.

Internal consistency was good except for the bowel pattern subscale. Relative reliability was excellent for subscales and moderate/good for single items. The SRD was 2.8 points for the bowel pattern subscale, 4.3 points for the bowel control subscale and 3.6 points for the quality-of-life subscale.

Conclusions

The Danish ICIQ-B is well accepted by Danish PFD-patients. Discriminant validity and test-retest reliability are good but structural validity and internal consistency of the bowel pattern subscale is questionable.

ID 11

Patients' experiences of pelvic floor rehabilitation via physiotherpeutic digital care visits postpartum.

Presentation method: Poster presentation

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Background

Pregnancy and vaginal delivery are risk factors for pelvic floor dysfunction. Physiotherapy treatment for pelvic floor dysfunction postpartum is seen as minimally invasive and can consist of information, pelvic floor training, manual treatment and/or general physical activity. Digital care is being established more and more and today physiotherapeutic digital care visits are offered in connection with pelvic floor rehabilitation postpartum. There is a lack of knowledge about digital care and it has not yet been explored how patients experience digital pelvic floor rehabilitation. Therefore, the aim of this study was to explore patients' experiences of pelvic floor rehabilitation via physiotherapy digital care visits postpartum.

Materials and methods

Patients who received digital care visits for pelvic floor rehabilitation postpartum were recruited with the help of pelvic floor physiotherapists around Sweden. Individual semi-structured interviews were conducted with 14 participants. The material was analyzed according to an inductive content analysis.

Results

Main category: Digital healthcare visits – a complementary piece of a puzzle that contributes to person-centred rehabilitation. Three underlying categories: (1) Digital care visits enable equal pelvic floor rehabilitation; (2) Digital participation is based on communicative skills; and (3) A digital barrier without access to physical visits.

Conclusion

This study contributes knowledge based on patients' perspectives that can provide guidance to be able to accommodate interventions in digital pelvic floor rehabilitation postpartum. The result indicates that the possibility of digital care visits can be advantageously implemented as a supplement in the pelvic floor rehabilitation process postpartum to promote person-centered rehabilitation.

ID 14

Validation of Clavien-Dindo classification of complications after reconstructive pelvic floor surgery

Presentation method: Oral presentation

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Background

Structured registration and classification of complications is essential to strategic and continuous improvement of surgical care. The Swedish national register for Gynecological Surgery (GynOp), contains patient- and clinician-reported perioperative data since 1997 with a coverage of >90%. GynOp added the Clavien-Dindo (CD) complication classification(1) in 2017. This study is part of the GYNCOM project that has previously validated the use of CD for hysterectomy and adnexal surgery(2), and aims to validate CD for pelvic reconstructive surgery.

Material and Methods

A digital survey regarding clinical experience and feasibility and importance of complication assessment in GynOp was sent to 469 gynecologists across Sweden. Each responder rated 20 fictive GynOp cases according to CD. Fleiss Kappa was calculated for the level of interrater agreement. According to the power calculation 88 responses were required.

GYNCOM National Ethics Board approval (Dnr 2023-00225-02).

Results

Of 143 responders, 40 incomplete answers were excluded, leaving 103 complete responses. The level of agreement on the occurrence of a complication was moderate (Fleiss Kappa 0.45), although 9/20 cases had an almost perfect agreement (≥90%). The overall level of agreement on CD classification was moderate (Fleiss Kappa 0.52).

Conclusions

The overall agreement level in CD classification of fictive pelvic reconstructive surgery cases was moderate. However, severe complications had higher agreement levels than more common milder complications bordering on normal post-operative course. We recommend that clarifying information should be available to raters, facilitating correct classification.

Reference 1

Dindo D, Demartines N, Clavien PA. Classification of surgical complications: a new proposal with evaluation in a cohort of 6336 patients and results of a survey. Ann Surg. 2004 Aug;240(2):205-13. doi: 10.1097/01.sla.0000133083.54934.ae. PMID: 15273542; PMCID: PMC1360123.

Reference 2

Collins E, Liv P, Strandell A, et al. Physicians' assessment of complications after gynecological surgery in Sweden: The GYNCOM survey. Acta Obstet Gynecol Scand. 2023;00:1-9. doi:10.1111/aogs.14661

ID 15

Tension-free vaginal tape versus polyacrylamide hydrogel: patient choice and treatment outcomes

Presentation method: Oral presentation

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Background

In recent years, the use of mesh in treating stress urinary incontinence (SUI) has raised safety concerns. At Helsinki University Hospital, polyacrylamide hydrogel (PAHG) injection has been offered as an alternative to the traditional tension-free vaginal tape (TVT) as a treatment for primary SUI, since 2019. We aim to investigate patient choice and outcomes for these procedures.

Materials and methods

Data were extracted from hospital registry for primary SUI patients treated with TVT or PAHG procedures at Helsinki University Hospital in 2019-2020. Data concerning complications and re-treatments were collected for two years after the primary treatment.

Results

217 (56%) of the patients chose the TVT procedure whereas 172 (44%) of the patients chose the PAHG treatment. Baseline characteristics were similar between the groups. The re-treatment rates were 0.92% in the TVT group and 26.2% in the PAHG group ($p<0.001$). Among women who had primary PAHG, 53.3% chose an additional PAHG injection as re-treatment. Complications occurred in 14.3% of the TVT cases and 7.6% of the PAHG cases ($p=0.038$). TVT complications ranged from Clavien-Dindo classification grades I to IIIb, while PAHG resulted from grades I to II. In the TVT group, 4.6% had complications requiring reoperations.

Conclusion

TVT treatment is associated with a higher risk of complications, while PAHG injection requires re-treatment more frequently. In this study re-treatment rates were lower compared to our randomized clinical trial [1], indicating that patients were fairly satisfied with the choice they had made.

Reference

1. Itkonen Freitas A-M, Isaksson C, Rahkola-Soisalo P, Tulokas S, Mentula M, Mikkola TS. Tension-free vaginal tape and polyacrylamide hydrogel injection for primary stress urinary incontinence: 3-year followup from a randomized clinical trial. J Urol. 2022;208(3):658–67.

ID 16

Vaginal CO^2 laser therapy for genitourinary syndrome in breast cancer survivors - A randomized blinded controlled trial

Presentation method: Poster presentation

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Background

Approximately 50-75 % of breast cancer survivors (BCS) experience one or more symptoms as part of the genitourinary syndrome of menopause (GSM), which results in impairment of their quality of life. Vaginal CO_2 laser induces a wound-healing cascade with formation of elastin-collagen fibers facilitating tissue remodelling in the vaginal wall.

Materials and methods

This study contains three substudies.

1. Study one is a dose-response study with 30 participants exploring the ideal number of laser treatments needed to achieve an effect on GSM symptoms in BCS on endocrine therapy.

2. Study two is a single center, participant-blinded randomized, placebo-controlled study comparing vaginal laser therapy with placebo laser therapy in 60 BCS on endocrine therapy. The number of treatments is depending on the results obtained from study I.

3. Study three is a one-year follow up of study two.

Results

It is an ongoing study, and as of now all patients have been enrolled for study one. Primary outcome is vaginal dryness. Secondary subjective outcomes are vaginal pain, itching, soreness, urinary symptoms and sexual function. Secondary objective outcomes are change in vaginal histology (punch biopsy), vaginal pH and change in vaginal and urine microbiota.

Conclusion

The short and long-term effect of vaginal laser therapy on BCS with GSM symptoms, will be investigated for the first time in the Nordic countries. Additionally, this study will be the first to explore alterations in vaginal and urine microbiota during vaginal laser therapy in BSC.

ID 17

The PLUS study: Vicryl® versus VicrylPlus® for Primary Suturing of Perineal Tears after Delivery. A Randomized Controlled Trial.

Presentation method: Oral presentation

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Background

Antibacterial-impregnated sutures aim to prevent surgical-site infections (SSI). Avoiding infection in obstetric lacerations after delivery is imperative, but evidence is lacking for the suture's ability to prevent SSI in the perineum and vagina.

Material and Methods

A single-center, single-blinded, adaptive-parallel-group randomized trial at Lund University Hospital, Sweden (ClinicalTrials/NCT02863874). Women ≥18 years with a perineal tear at delivery were eligible for randomization. Participants were randomly assigned 1:1 to triclosan-coated-absorbable suture, VicrylPlus®, or to control (conventional-absorbable suture) Vicryl®. Primary outcome was wound infection within 30 days after delivery. Modified intention-to-treat was used for final analyses.

Results

1890 women were randomized to VicrylPlus® (n=937, final analysis 926) or Vicryl® (n=953, final analysis 946). The cruel infection rate was 4% in the intervention group, compared to 5.2% in the control group (OR 0.75, 95% CI 0.48-1.17, P=0.22). Analyzing second-degree tears, triclosan-coated sutures were associated with lower infection rate (4.4% versus 7.2%) (OR 0.6, 95% CI; 0.36-0.98), P<0.05).

Episiotomy (OR 5.49, 95% CI; 3.45-8.73), instrumental delivery (OR 4.44, 95% CI; 2.68-7.34), or the use of NSAID during the first postpartum week (OR 2.53, 95% CI; 1.05-4.27) were associated with increased risk for infection (P<0.001) but after binary regression analysis, episiotomy was the single most important risk-factor for infection (OR 2.64 95% CI 1.33;5.26).

Conclusions

We suggest using triclosan-coated sutures for closure of second-degree tears including episiotomies, and to administer prophylactic antibiotics after performing an episiotomy. Future studies are warranted to indicate the effect of antibiotics on instrumental deliveries and potential drawbacks of NSAIDs in the postpartum period.

ID 18

Are patients less satisfied and are there more complications after recurrent than primary prolapse surgery? – a registry based study.

Presentation method: Oral presentation

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Background

There is a high recurrence rate after pelvic organ prolapse (POP) surgery, and many women need subsequent treatment. Our aim was to examine whether postoperative symptoms, satisfaction and complications were different in primary versus recurrent POP surgery.

Material and methods

Register-based cross-sectional study at Trondheim University Hospital (TUH) including all POP surgeries between 2013- 2021. The surgeon reported previous and actual surgery in each compartment. The patient filled in a questionnaire on symptoms (yes/no), satisfaction (5-point Likert-scale) and complications 6-12 months postoperatively. Recurrent surgery (repeat surgery in same compartment) was compared to primary surgery using chi-square test.

Results

1630/1701 (95.8%) procedures were entered in TUH's registry. 75.9% were primary surgeries and 24.1% recurrent in same or new compartment. Mean (SD) age after recurrent vs primary surgery was 68.0 (10.6) vs 63.1 (12.5) years, $p<0.01$ and BMI 26.6 (3.9) vs 26.4 (4.1) kg/m2, $p=0.31$. 954/1239 (77.0%) answered the postoperative questionnaire. Symptoms after recurrent vs. primary surgery were: Bulge sensation 26.3% vs. 31.4%, ($p=0.22$), pelvic pressure 19.0% vs. 19.4%, ($p=0.91$), voiding problems 38.6% vs. 38.5%, ($p=1.0$), problems with defecation 4.6% vs. 6.8%, ($p=0.31$), urinary incontinence: 55.7% vs. 52.3%, $p=0.44$. Patient-reported complications were 23.4% after recurrent and 18.7% after primary surgery, ($p=0.17$). Satisfaction with surgery was 93.3% after recurrent and 90.0% after primary surgery ($p=0.23$).

Conclusion

There was no significant difference in postoperative symptoms, complications or satisfaction among patients who had recurrent surgery compared to primary POP surgery. This can be used in counselling patients when choosing treatment options for recurrent POP.

ID 19

Choice of surgery and anesthesia, complications and satisfaction over time - a registry-based study of pelvic organ prolapse surgery

Presentation method: Oral presentation

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Background

Our aim was to explore any changes over time in primary or recurrent surgery, anesthesia, complications and satisfaction among patients undergoing pelvic organ prolapse (POP) surgery at Trondheim University Hospital (TUH).

Material and methods

Register-based cross-sectional study at TUH including all POP surgeries between 2013- 2021. The surgeon reported previous and actual surgery in each compartment, perioperative complications and anesthetic method. The patient filled out a questionnaire on satisfaction (5-point Likert-scale) and complications 6-12 months postoperatively. Changes over time were analysed using logistic regression.

Results

1630/1701 (95.8%) procedures were entered in TUH's registry. Mean (SD) age was 64.0 (12.4)years and BMI 26.4 (4.1)kg/m^2. 15.8% were recurrent procedures in same compartment and 8.3% in another compartment (no changes over time). 21.2 % were Manchester procedures (annual increase 5.5%, p<0.01). General anesthesia was used in 17.9% (annual decrease 17.4%) and local anesthesia with light sedation in 67.4% (annual increase 14.6%), p <0.01). Perioperative complications were stable at 1.7%. 954/1239 (77.0%) answered the postoperative questionnaire, and 90.2% reported symptom improvement. Complications were reported by 19.8%, with annual decrease 13.8%, p < 0.01. This was mainly caused by reduction of urinary tract infections after introduction of Hiprex prophylaxis (annual decrease 22.3%, p < 0.01).

Conclusion

Prevalence of Manchester procedures increased over time. The use of general anesthesia decreased and local anesthesia with light sedation increased over time. Change in anesthetic method seems to be safe, as perioperative complications were uncommon, and postoperative complications decreased over time. Symptom improvement was stable at 90%.

ID 20

Is the Manchester procedure better than isolated anterior colporrhaphy for urinary incontinence, patient satisfaction and complications? – a registry-based study

Presentation method: Oral presentation

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Background

The aim of the study was to explore postoperative symptoms of incontinence, satisfaction and complications after Manchester procedure compared to anterior colporrhaphy in treating pelvic organ prolapse (POP).

Material and methods

Register-based cross-sectional study at Trondheim University Hospital including all POP surgeries between 2013- 2021. The patient filled in a questionnaire on satisfaction with surgery (5-point Likert-scale), stress- or urgency urinary incontinence and complications 6-12 months postoperatively. Manchester procedure (cervical amputation, anterior colporrhaphy and any procedure in the posterior compartment) was compared to anterior colporrhaphy without cervical amputation in women with intact uterus, using chi-square test.

Results

A total of 173 questionnaire responders underwent Manchester procedure and 266 anterior colporrhaphy without cervical amputation. Mean (SD) age was 65.1 (10.5) vs 65.9 (10.6) years p=1.0, and BMI 26.3 (3.9) vs 26.1 (3.8) kg/m^2, p=0.60. There was no significant difference in symptoms between the groups preoperatively. At 6-12 months follow-up, bulge sensation was reported by 29.4% (Manchester) vs 36.9% (anterior colporrhaphy), p=0.1. Urgency incontinence was reported by 35.5% vs 46.7%, p=0.02, stress incontinence by 33.7% vs 39.8%, p=0.21 and complications by 24.9% vs 19.2%, p=0.16 after Manchester and anterior colporrhaphy respectively. Both groups were satisfied with the surgical result; 90.1% after Manchester and 87.3% after anterior colporrhaphy, p=0.39.

Conclusion

Women that underwent a Manchester procedure reported less bulge sensation and urinary incontinence postoperatively than women in the anterior colporrhaphy group, but the difference was significant only for urgency incontinence. Prevalence of complications and satisfaction with surgery were similar for both groups.

ID 21

Are voiding difficulties associated with tape location 10-20 years after tension free vaginal tape (TVT) surgery?

Presentation method: Oral presentation

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[4]Institute of clinical medicine, University of Oslo

Background

The aim was to study potential associations between subjective and objective voiding difficulties, anterior compartment descent and TVT location after surgery.

Material and methods

Cross-sectional study of 161 women undergoing TVT surgery in 2001-2012. A validated questionnaire grading stress (0-12) and urgency (0-8) incontinence symptoms was used. Associations were analyzed between women stating subjective voiding difficulties (yes/no) and women with/without post void residual urine > 200 ml. We used ultrasound to measure TVT-distance from the bladder neck at rest. TVT-distance to the symphysis pubis and descent of the bladder neck and bladder was measured during Valsalva. Independent samples t-test was used.

Results

Mean (SD) age was 60 (12.3) years, BMI 26.1 (4.2) kg/m^2 and time since surgery 14.3 (5.1) years. The 44.9 % (71/158) women reporting voiding difficulties had higher stress index (2.7 vs 1.8, p = 0.09), urgency index (2.8 vs 2.1, p = 0.04), and more bladder descent (0.19 mm vs 0.23 mm, p = 0.04) than women without voiding difficulties. No difference in TVT-distance from bladder neck or symphysis was found (1.7 vs 1.8 mm, p = 0.20 and 1.2 vs 1.1 mm, p = 0.44). 8.8 % (11/125) had residual volume > 200 ml. This group had more bladder neck descent than women with less residual (0.22 vs 0.79 mm, p = 0.045), but no differences in tape locations were found.

Conclusion

Descent of anterior compartment on ultrasound and not tape-location was associated with voiding difficulties and high post-void residuals 10-20 years after surgery.

ID 22

Are stress and urgency urinary incontinence associated with levator ani muscle avulsions, muscle contraction or TVT-location after surgery?

Presentation method: Oral presentation

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Background

The aim was to study potential associations between subjective and objective voiding difficulties, anterior compartment descent and TVT location after surgery.

Material and methods

Cross-sectional study in 2022 of 161 women operated with TVT in 2001-2012. We used transperineal ultrasound to diagnose levator avulsions, change in levator hiatal diameter from rest to contraction and TVT-distance from bladder neck at rest and symphysis pubis during Valsalva. A validated questionnaire grading stress (0-12) and urgency (0-8) incontinence symptoms was used. Measurement of Mean Modified Oxford Scale (MOS) on palpation and a cough-jump stresstest with minimum 200 ml bladder volumewas also performed. Independent samples t-test and Spearmans rank correlation was used for analyses.

Results

Mean (SD) age was 60 (12.3) years, BMI 26.1 (4.2) kg/m^2 and time since surgery 14.3 (5.1) years. 30.5 % (47/154) had levator avulsions. MOS was 3.2 (SD 1.2). Change in levator hiatal diameter from rest to contraction was 18.4 % (SD 9.3). No difference between women with or without levator avulsions regarding stress index 2.4 (SD 2.9) vs 1.9 (SD 2.7), urgency index 2.5 (SD 2.0) vs 2.1 (SD 1.9) or gram leakage 1.7 (SD 11.3) vs 1.4 (SD 5.3) was found, $p > 0.05$. Leakage, stress and urgency incontinence indices were neither correlated with contraction (ultrasound and MOS) or TVT-location (all r_s range 0.69 to 0.15, $p > 0.05$).

Conclusion

We found no association between levator avulsions, muscle contraction or TVT-location with objective leakage, stress or urgency urinary incontinence symptoms 10-20 years after surgery.

ID 23

Tension-Free Vaginal Tape and Polyacrylamide Hydrogel-Injection for Primary Stress Urinary Incontinence in Women: 5-Year Follow-Up from A Randomized Clinical Trial

Presentation method: Oral presentation

Anna-Maija Itkonen Freitas[1], Camilla Isaksson[2], Päivi Rahkola-Soisalo[2], Maarit Mentula[2], Tomi Mikkola[3]

[1]MD, [2]MD, PhD, [3]MD, Professor

Background

Tension-free vaginal tape (TVT) has been the gold standard treatment for female stress urinary incontinence (SUI) but concerns have risen about the complications associated with mesh. Polyacrylamide hydrogel (PAHG, Bulkamid®) is a minimally invasive alternative. However, the long-term safety and efficacy of this treatment is undefined.

Materials and Methods

In this randomized, controlled, non-inferiority trial, 223 women with primary SUI were randomized and 212 women underwent treatment. At 5-years, 195 (91.9 %) women attended the follow-up. Primary outcome was patient satisfaction. Secondary outcomes were effectiveness and complications.

Results

At 5-years, the satisfaction score (VAS 0-100) median was 98 (IQR 86-100) in the TVT-group and 90 (IQR 75-99) in the PAHG-group. The score of ≥80 was reached in 89 (92.7 %) and 74 (74.7%) (difference 18.0 %, 95% CI 7.7 % to 28.0 %), respectively. Thus, PAHG did not meet the non-inferiority criteria set in our study. The cough stress test was negative in 91 (94.8%) of TVT-patients versus 81 (81.8%) of PAHG-patients (difference 13.0%, 95% CI 3.9% to 22.2%). Within the 5-year follow-up, any peri- or postoperative complication before crossover was detected in 42 (43.8%) women in the TVT-group and 22 (22.2%) women in the PAHG-group (difference 21.5 %, 95 % CI 8.4 % to 33.8 %).

Conclusions

In long-term follow-up, TVT shows better subjective and objective cure rates than PAHG, but complications were more often associated with TVT. Since the majority of PAHG-treated women were also cured or improved, PAHG can be offered as a safe and durable alternative.

ID 24

The Fast study: The Follow-up After Shorter Tapes Study; a registry study from the Norwegian Female Incontinence Registry (NFIR)

Presentation method: Oral presentation

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Background

Traditional polypropylene slings (Trad), Tension-free Vaginal Tape Obturator inside-out (TVT-O) and Tension-Free Vaginal Tape (TVT), have well documented continence outcomes, but can cause serious complications such as long-term pain. Ajust and Abbrevo are shorter slings with less synthetic material. Larger studies on shorter slings are in demand.

Materials and Methods

Registry study from the Norwegian Female Incontinence Registry (NFIR). Preoperative and 6-12 months follow-up data from 2009-2021 were used to compare the shorter Ajust and Abbrevo to Trad. Objectively cured was defined as 0 gram leakage on standardized cough-jump stress-test. Subjectively cured was defined as stress index-score < 3 generated from a validated questionnaire. Chi-square, Kruskal-Wallis and logistic regression were used.

Results

We identified 611 Ajust, 2772 Abbrevo and 18612 Trad. There were small, but significant differences between groups at baseline. Mean age was lower, mean Body Mass Index (BMI) higher and mean leakage larger for shorter slings ($p < 0.01$).

Objective and subjective cure rates at 6-12 months were lower for shorter slings. Objectively cured: Abbrevo 86,5 %, Ajust 84.6 % and Trad 92.7 %, $p < 0.01$. Subjectively cured: Abbrevo 76.2 %, Ajust 76,6 % and Trad 81.2 %, $p < 0.01$. Shorter slings had fewer over-all complications: Abbrevo 6.6 %, Ajust 3.9 % and Trad 9.5 %, $p < 0.01$. All outcomes were adjusted for differences at baseline.

Conclusions

All slings had good subjective and objective outcomes at 6-12 months. Shorter slings had over-all fewer complications at the expense of poorer subjective and objective continence outcomes.

ID 25

Comparison of bilateral sacrospinous fixation and vaginal polypropylene mesh for apical prolapse; a national register-based study.

Presentation method: Oral presentation

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Background

Unilateral Sacrospinous Fixation with sutures has been practiced as one of many methods for correction of apical prolapse in Sweden. It is associated with high rate of postoperative prolapse recurrence and pain. We were the first in Sweden to perform Bilateral Sacrospinous Fixation (BSSF) with polypropylene sutures and compare it with Vaginal UppHold Lite System mesh (VUM).

Materials and Methods

A Swedish national quality register for gynecological surgery (Gyn-Op) based study, where a nationwide cohort of women undergoing VUM were compared with women operated with BSSF in two centers by two surgeons in Sweden, between 2015 and 2018.

Results

There were no significant differences between groups (BSSF n=134, VUM n=218) with regards to age, parity, and demographic characteristics. BSSF compared to VUM had longer operation time (median 104 versus 48 min, $p < 0.001$), longer hospital stay (1.3 versus 1.0 days, $p < 0.001$) and longer time to return to Activities of Daily Living (ADL) (median 4 versus 2 days). Severe postoperative complications were however, lower in the BSSF group at 8 weeks (6,5% versus 11,1%) and 1 year (5,0% versus 6,4%) Patient-reported pain rate was higher in BSSF group; 8 weeks postoperatively (27.1% versus 21.2%) and after 1 year (6,4% versus 5,7%), bulging sensations were more prevalent in BSSF group (22.7% vs 14.9%).

Conclusions

BSSF is a safe effective procedure with higher subjective prolapse symptoms, but lower rate of severe complications compared to vaginal mesh for treatment of apical prolapse. Patient-reported pain was slightly higher in BSSF group compared to VUM.

Reference

Galan LE, Bartolo S, De Graer C, Delplanque S, Lallemant M, Cosson M. Comparison of Early Postoperative Outcomes for Vaginal Anterior Sacrospinous Ligament Fixation with or without Transvaginal Mesh Insertion. J Clin Med. 2023 May 25;12(11):3667. doi: 10.3390/jcm12113667. PMID: 37297862; PMCID: PMC10253670.

ID 26

A follow-up study of reoperations due to recurrent prolapse and SUI after native tissue, transvaginal- and abdominal mesh surgery.

Presentation method: Oral presentation

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Background

Despite the wide variety of surgical approaches available, pelvic organ prolapse (POP) surgery has been associated with high failure rates over time. The objective of this study is to describe and compare reoperation rates for recurrent prolapse and stress urinary incontinence (SUI) after POP surgery.

Materials and Methods

This nationwide prospective cohort included 3515 women aged over 18 years undergoing POP surgery in Finland during 2015. Follow-up data on reoperations for recurrent prolapse and SUI procedures were gathered from the Care Registers for Social Welfare and Health Care between Jan 1st, 2015, and Dec 31st, 2017. Reoperation rates were compared between native tissue (NTR), transvaginal (TVM) and abdominal mesh (AM) surgeries.

Results

A total of 343 (9.8%) women had a reoperation for recurrent prolapse or SUI during follow-up, with a mean follow-up time of 30.2 months (range 24.0 to 35.9 months) and a mean time of 15.2 (SD 7.8) months to reoperation. The majority, 312 (8.9%) women, had one reoperation during the follow-up. No significant differences between surgical approaches were detected in the rates of reoperation for recurrent prolapse (NTR 195 [6.8%], TVM 33 [7.7%] and AM 20 [8.0%], p=.673). During follow-up 106 (3.0%) women had operative treatment for SUI, with significantly higher proportion in transvaginal mesh group compared to NTR or AM group (NTR 72 [2.5%], TVM 27 [6.3%], AM 7 [2.8%], p<.001).

Conclusions

Reoperation due to SUI was significantly more common after TVM compared to NTR and AM surgeries. Reoperations for recurrence did not differ between surgical approaches.

ID 27

Dorsal Genital Nerve stimulation in patients with overactive bladder. First clinical results with the UCon neurostimulator

Presentation method: Oral presentation

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Background

Electrical stimulation of the dorsal genital nerve (DGN) has shown promising results in experimental settings for treating overactive bladder (OAB) syndrome. UCon neurostimulator is a new device that provides electrical stimulation of the dorsal nerve of the penis or clitoris. This study aimed to test UCon on women and men with idiopathic OAB. We hypothesized that stimulation of DGN is safe without serious adverse events and decreases the number of urgency urinary incontinence (UUI) episodes.

Materials and Methods

The study was a prospective, multicenter, feasibility study. Inclusion criteria were men and women ≥18 years old with OAB. Exclusion criteria were treatment with onabotulinumtoxin A within three months or medical bladder relaxants within two weeks. Ucon stimulation was given for four weeks as either time-limited stimulation (30 minutes/day) or on-demand stimulation during urgency episodes.

Results

Fourteen patients were included (12 women and 2 men). Six patients used time-limited stimulation and eight on-demand stimulation. One patient did both stimulation modalities. Mean number of UUI episodes/7 days, including both stimulation modes, decreased significantly with a mean difference of 7.6 (95% confidence interval -0.1 to 15.4, p=0.05) by the fourth stimulation week. For the subgroups, mean UUI episodes/7 days in the time-limited group decreased insignificantly from 15.3±13.9 to 4.5±4.2. Similarly, non-significant change from 19.5±9.5 to 14.3±14.9 was observed in the on-demand group. No serious adverse effects were noticed.

Conclusions

These first clinical results of UCon neurostimulator are promising for treating OAB with no adverse effects observed. Further studies are necessary for clinical implementation.

ID 28

Prevalence of levator ani muscle avulsion in primiparous women with grade 3-4 perineal tears as assessed with three-dimensional transvaginal ultrasound

Presentation method: Poster presentation

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Background

Interest in levator ani muscle avulsion has increased during recent years and became an important aspect in managing patients with pelvic floor dysfunction. The aim of this study was to establish prevalence of levator ani muscle avulsion in primiparous women with grade 3-4 perineal teas as assessed with three-dimensional (3D) transvaginal ultrasound

Materials and Methods

Women with grade 3 and 4 perineal tears were examined 3-4 months postpartum with 3D transvaginal ultrasound (3D-TVUS) at Skåne university hospital using 360 degrees rotational probe of 9MHz (B-K Medical, Herlev, Denmark). Ultrasound volumes were analyzed to assess levator ani muscle integrity. Avulsion was described as unilateral or bilateral levator ani muscle detachment from the inferior ramus of the pubic bone.

Results

Out of 166 women included, 18 (11%) women had a at least one-sided levator ani muscle avulsion (LAM): 10 (6%) right-sided and 11 (7%) left-sided. Three of 18 (17%) women had bilateral LAM avulsion. Eight women had avulsions in both pubococcygeus and puborectal muscles, eight had avulsion in the pubococcygeus muscle only and five had avulsion in the puborectal muscle only.

Conclusions

At transvaginal ultrasound examination one in ten primiparous women with grade 3-4 perinal tears had levator ani muscle avulsion at least at one side. Larger studies are needed to assess risk factors for LAM avulsion and its clinical importance in relation to short- and long-term complications.

ID 29

Prevalence of persistent defects in anal sphincters in women with grade 3-4 perineal tears

Presentation method: Oral presentation

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Background

Women with grade 3-4 perineal tears can suffer from short- and long-term complications, such as anal incontinence that may be associated with persistent defects in anal sphincters. The aim of this study was to establish prevalence of persistent defects in external and internal anal sphincter (EAS and IAS) at three-dimensional (3D) endoanal ultrasound in women after grade 3-4 perineal tears.

Materials and Methods

Primiparous women with clinically diagnosed grade 3 - 4 perineal tears at Skåne university hospital were examined 3-4 months postpartum with 3D- endoanal ultrasound using 360° probe (BK Herlev, Denmark). Ultrasound volumes were saved and analyzed. External and internal sphincter defects were reported when a gap of >30° was seen on ultrasound.

Results

In total 166 women were included in the study. According to perioperative assessment 128 (77%) had tear in EAS only, 13 (8%) in IAS only, 24 (14%) in both EAS and IAS and one woman (1%) had buttonhole tear. At follow-up ultrasound examination, 20 (12%) women had defect in EAS and 27 (16%) in IAS and 5(3%) in both EAS and IAS. Of the 128 women perioperative diagnosed with tear in EAS only, 14 (11%) had defect in IAS at follow-up ultrasound.

Conclusion: One of ten women with grade 3-4 tear had persistent defects in EAS and one in six in IAS. Of the women clinically diagnosed with tear in only EAS, one in ten had internal sphincter defect seen on 3D-EAUS. Careful assessment of sphincters postpartum is important to prevent persistent tears.

ID 30

Case series of successful removal of tension-free vaginal tape

Presentation method: Oral presentation

Despina Flondell Sité[1] (SE)

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Background

The tension-free vaginal tape (TVT) procedure is an operation for stress urinary incontinence with polypropylene mesh tape usage (1).

A systematic review on long term safety of synthetic mid-urethral slings showed that the incidence rates of reoperations and complications are heterogeneous (2). We have observed a multitude of complications associated with TVT treatment. Among others are perforation of urethra, bladder or vagina, stone formation, and chronic infections. 1618 patients underwent TVT operation in Sweden 2022 (3).

Materials and Methods

13 patients with complications after TVT mesh insertions were admitted at Skåne University Hospital, Malmö between 2020- 2023. 3D ultrasound imaging and cystourethroscopy examination were performed pre- and postoperatively. Mean patient age was 61. Laparoscopic TVT removal was performed in 11 out of 13 cases. Two patients underwent transvaginal and transurethral removal.

Results

Cystourethroscopy and 3D ultrasound control 3 months postoperatively reveal no mesh in the bladder/urethra. 2 patients with partial removal of TVT had minimal recurrence mesh erosion. The degree of urinary incontinence after TVT removal varied between 0-115 g.

Conclusions

TVT extirpation was successful i 11 out of 13 patients.

Reference 1

1. Kleeman SD, Karram MM. The tension-free vaginal tape procedure. Urol Clin North Am. 2011 Feb;38(1):39-45, vi. doi: 10.1016/j.ucl.2010.12.006. PMID: 21353078.

Reference 2

2. Guillot-Tantay C, Van Kerrebroeck P, Chartier-Kastler E, Dechartres A, Tubach F. Long-term Safety of Synthetic Midurethral Sling Implantation for the Treatment of Stress Urinary Incontinence in Adult Women: A Systematic Review. Eur Urol Open Sci. 2023;54:10-19. Published 2023 Jun 10. doi:10.1016/j.euros.2023.05.013 3. Swedish National Quality Register of Gynecological Surgery

Surgical treatment of apical prolapse. Nationwide cohort studies evaluating native tissue operations

Karen Husby (DK)

Pelvic organ prolapse (POP) is a common condition entailing reduced quality of life for the affected women. Every fifth Danish woman undergoes surgery for POP and the prevalence of POP is increasing with aging populations. POP induces extensive – and expanding – expenses for the societies.

POP is divided into three compartments: anterior, apical and posterior. With this thesis, we wanted to improve knowledge about the best surgical treatment of prolapse in the apical compartment using native tissue operations. Apical prolapse is descensus of either the uterus or the vaginal vault post hysterectomy.

We found that in Denmark uterine prolapse is typically surgically treated with the uterine preserving Manchester procedure and vaginal hysterectomy. Furthermore, the sacrospinous ligament hysteropexy was implemented around year 2010. At the university hospitals, there was a tendency towards performing uterine preserving techniques. Comparing the three techniques we found the highest rates of reoperations after sacrospinous ligament hysteropexy and the lowest rates after the Manchester procedure. Furthermore, we demonstrated lower financial costs related to the Manchester procedure compared to the vaginal hysterectomy.

The Manchester procedure includes an amputation of the cervix and a suspension with the cardinal ligaments. Accordingly, the risk of cervical cancer is likely changed. Cervical stenosis after a Manchester procedure is reported and might mask a potential endometrial cancer. Therefore, we assessed the risk of endometrial and cervical cancer after the Manchester procedure. We compared women who underwent the Manchester procedure with comparable women who underwent a comparable operation. We found no effect on the risk or the prognosis of endometrial cancer after the Manchester procedure. Regarding cervical cancer, we found a lower risk of being diagnosed after the Manchester procedure while the cancer specific mortality and the distribution of histological subtypes was unchanged.

Studying surgical treatment of vaginal vault prolapse, we found higher rates of reoperations after the sacrospinous ligament fixation compared to the ipsilateral uterosacral ligament suspension. In addition to reconstructive operations apical prolapse can be treated with obliterative operations. Here, we showed few subsequent uterine or vaginal cancers.

Investigating risk factors of POP, we demonstrated an association between hysterectomy on benign indication and increased risk of POP operation. Particularly in the posterior compartment. The type of hysterectomy did not influence the association considerably indicating that the uterus per se protects for POP.

The uterus is not for having babies only.

PELVIC FLOOR DYSFUNCTION AFTER CHILDBIRTH - SYMPTOMS, DIAGNOSIS, TREATMENT

Emilia Rotstein (SE)

Vaginal delivery is a trauma to the levator ani muscles, the perineal muscles, and the anal sphincter complex. A levator ani deficiency cannot be surgically remedied and increases the risk of pelvic floor dysfunction later in life. Contrarily, an injury to the perineal body can be sutured directly following vaginal birth, however, perineal trauma may in the aftermath result

in a deficient perineum. There is a lack of knowledge regarding the natural history of recovery after vaginal childbirth, which symptoms are reported, and how high the prevalence of persistent symptoms is. Thus, there is a need for improved tools to identify and diagnose women displaying symptoms of deficiencies in either level of the pelvic floor and develop refined treatment options, with the ultimate goal of improved quality of life. Therefore, the overall aim of this thesis was to explore the symptoms, diagnostics, and possible surgical treatment associated with a deficient perineum and concomitant levator ani muscle defects.

Study I was a prospective cohort study investigating symptoms in non-instrumentally delivered primiparas with no more than a second-degree perineal tear, one year after delivery. In total, 410 women completed an inventory of questions encompassing fecal incontinence, bowel emptying difficulties, and sexual dysfunction. The results showed that symptoms from the posterior compartment were common irrespective of the extent of the perineal tear. In conclusion, these symptoms must be considered and addressed in all women after vaginal delivery.

Study II was an observational study to evaluate how consistently different raters can assess levator ani defects using the Levator Ani Deficiency (LAD) score system in a subsample of primiparas from study I. In addition, rates of LAD in this low-risk subsample were estimated. By using two different endovaginal probes, three-dimensional ultrasound volumes of 141 women were assessed on two occasions. Correlations of scores and categories within and between raters and probes were calculated using Kendall's tau-b coefficient. Overall, intra- and interrater, and -probe correlations were very high with correlations for intrarater comparisons of >0.79 and interrater comparisons of >0.78. However, the rate of LAD in this low-risk subsample was, as expected, low, 13-15% had scores correlating to a moderate or severe injury. In conclusion, the LAD scoring system can consistently be reproduced.

Study III was a mixed methods study to construct and initially validate an inventory to estimate symptoms of a deficient perineum. The preliminary inventory was tested on 170 patients diagnosed with a deficient perineum and results were compared to 54 primiparous women one year after elective caesarian section and 338 nulliparous women. Results showed that the final 11-item inventory, the 'Karolinska Symptoms After Perineal Tear Inventory' (KAPTAIN) could discern patients with symptoms such as an acquired sensation of wide vagina, vaginal flatulence, and bowel emptying difficulties, from the two control groups with high sensitivity (100%) and specificity (87–91%) when using a cut-off of 8 points out of a maximum score of 33 points. To conclude, the KAPTAIN inventory can detect symptomatic women with high accuracy and might be used to identify women in need of further support and investigation after vaginal birth.

Study IV was a follow-up study one year after standardized perineal reconstructive surgery of 131 patients with long-term symptoms of a deficient perineum. Patients with symptoms e.g., an acquired sensation of wide vagina, and a confirmed perineal body defect, completed the KAPTAIN inventory preoperatively and at one-year follow-up. All patients were examined with 3D ultrasound to evaluate concomitant LAD. The hypothesis that the primary outcome "sensation of wide vagina" would not improve as much in patients with LAD as in patients with an intact levator ani muscle was rejected. There was an overall significant score reduction after surgery for the whole group. In conclusion, a standardized perineal reconstruction can alleviate symptoms of a deficient perineum independent of LAD

The long-term effects of obstetrical anal sphincter injury on pelvic floor function

Ida E.K. Nilsson (SE)

Background

As women live longer, the long-term effects of childbirth may negatively affect their quality of life and professional careers.

Aim

This thesis investigates the long-term effects of vacuum extraction (VE) and one and two obstetrical anal sphincter injuries (OASIs). Temporal trends of OASI incidence were compared in four countries with comparable national medical birth registers and healthcare systems.

Material and methods

The study cohorts consisted of women with one (Papers I and III) or two deliveries (Paper II and IV). National birth registers were used, and in Papers I, II, IV birth register data were linked to information from a questionnaire survey on current pelvic floor disorders (PFDs).

Results

Paper I: OASI occurred three times more often during VE than spontaneous vaginal delivery (SVD). One OASI doubled the long-term prevalence of faecal incontinence (FI), irrespective of SVD or VE. The prevalence of other PFDs was similar after SVD and VE but lower after an acute caesarean section.

Paper II: The risk for a repeat OASI almost tripled after an OASI. The long-term prevalence of all components of FI doubled and tripled after one and two OASIs. Severe FI increased 3- and 5-fold.

Paper III: In 2004-2016, the incidence of OASI in primipara varied widely over time and between countries despite similar socio-economic conditions. Canada reported the highest and Austria the lowest rate of OASI. Only Norway reported a consistent and significant decrease in OASI incidence, which more than halved during the study period.

Paper IV: There was a significant trend of more frequent leakage, more severe grades of incontinence parameters, and an increasing impact of anal incontinence after one and two OASIs. The first and the second OASIs showed an equal cumulative effect on multiple self-reported outcome measures.

Conclusion

OASI was a potent risk factor for the prevalence, severity, and impact of long-term FI. Instrumental delivery was the leading risk factor for OASI. Perineal protection, when systematically and persistently applied, may lower the rate of OASI.

Female pelvic floor disorders : clinical aspects on surgical treatments

Ida Bergman (SE)

Background and aims

The life-time risk for a woman to undergo pelvic floor reconstructive surgery due to prolapse or incontinence is 20% and the high risk for recurrence after prolapse surgery is a major challenge. Surgical reconstruction of the perineal body is commonly performed, although studies assessing results of this procedure are scarce. Mid-urethral sling surgery has a cure rate of 80%, but whether the sling endures a subsequent delivery is largely unknown. In this thesis we aimed to investigate whether the choice of suture material has an impact on vaginal wall prolapse repair; whether cervical amputation results in similar cure rates in comparison to vaginal hysterectomy in women with uterine prolapse; if a subsequent delivery jeopardizes results from incontinence surgery; if physiotherapy and surgical treatment is equally effective in women with symptoms related to a poorly healed second-degree perineal tear.

Methods and main results

Study I and II are both register-based cohort studies based on data from the Swedish National Quality Register for Gynecological Surgery (GynOp). In Study I, 731 women who underwent primary anterior colporrhaphy and 384 women who underwent primary posterior colporrhaphy were included. We found a significantly lower rate of women reporting vaginal bulging symptoms one year after anterior colporrhaphy if a slowly absorbable monofilament suture was used compared to a more rapidly absorbable multifilament suture, 22% vs 30% (aOR 1.6, 95% CI 1.1-2.3). There was no difference between the suture groups in the posterior colporrhaphy cohort. In Study II, women with uterine prolapse who had undergone either cervical amputation (n=1979) or vaginal hysterectomy (n=1195) were analyzed. There were no differences between the two groups regarding neither symptom relief nor patient satisfaction at one year after surgery. Vaginal hysterectomy was associated with a higher rate of severe complications compared to cervical amputation, 1.9 % vs 0.2 % ($p < 0.001$).

Study III is a cross-sectional, survey-based study. National registers were used to identify women with a delivery subsequent to a mid-urethral sling procedure (n=207) and a matched control-group including women without childbirth after a mid-urethral sling procedure (n=521). Validated questionnaires investigating urinary symptoms were mailed to the study participants. Patient reported stress urinary incontinence was present in 22% of the women with a delivery after a mid-urethral sling procedure and in 17% of the women in the control group (aOR 1.2, 95% CI 0.7-2.0). Vaginal childbirth after mid-urethral sling surgery did not increase the risk of stress urinary incontinence compared to cesarean delivery.

Study IV is a randomized controlled trial where 70 women with a poorly healed second degree perineal tear, minimum six months post-partum, were randomized to either surgery or tutored pelvic floor muscle therapy. In an intention-to-treat analysis with worst case outcome imputation, treatment success at 6 months followup was significantly more frequent in the surgery group, 71% vs 11%, $p<0.001$.

Conclusions

In conclusion, the use of slowly absorbable monofilament sutures in anterior colporrhaphy was associated with a lower risk of symptomatic prolapse at one year postoperatively, compared to more rapidly absorbable multifilament sutures. In women with uterine prolapse, cervical amputation seems to result in similar patient reported outcomes as compared to vaginal hysterectomy, but comes with a lower risk of severe complications. Childbirth after a mid-urethral sling procedure does not increase the risk for recurrent stress urinary incontinence and the mode of a subsequent delivery does not seem to impact continence status. Finally, surgical treatment was superior to pelvic floor muscle therapy in providing symptom relief in women with poorly healed second-degree perineal tears.

List of papers

I. Bergman I, Westergren Söderberg M, Kjaeldgaard A, Ek M. Does the choice of suture material matter in anterior and posterior colporrhaphy? International Urogynecology Journal. 2016 Sep;27(9):1357-65.

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III. Bergman I, Westergren Söderberg M, Lundqvist A, Ek M. Associasions between childbirth and urinary incontinence after midurethral sling surgery. Obstetrics and Gynecology. 2018 Feb;131(2):297-303.

IV. Bergman I, Westergren Söderberg M, Ek M. Perineorrhaphy compared with pelvic floor muscle therapy in women with late consequences of a poorly healed second-degree perineal tear: a randomized controlled trial. Obstetrics and Gynecology. 2020 Feb 9.


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See you at the 34th NUGA meeting in Helsinki 2026

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