

levator ballooning between women with or without episiotomy (20 (19.4%) versus 23 (22.8%); $p = 0.557$) Oxytocine use was found to be a protective factor for LA (OR 0.48 (95% CI 0.234–0.990) $p = 0.047$). The duration of the second stage of labour increased the risk for LA (OR 1.01 (95% CI 1.001–1.028)). Non occiput anterior fetal position increased the risk for ballooning and for pelvic floor injuries (OR 10.38 (95% CI 1.87–57.66) and OR 11.01 (95% CI 1.26–96.03). There were neither differences in urogynecological complaints between women with or without episiotomy nor between women with or without pelvic floor injuries.

Interpretation of results: Pelvic floor injury is related with a prolonged second stage of labor, but not with episiotomy.

Conclusions: Episiotomy has no influence in developing pelvic floor injuries or urogynecological complaints.

References

- [1] Kapoor DS, Thakar R, Sultan AH. Obstetric anal sphincter injuries: review of anatomical factors and modifiable second stage interventions. *Int Urogynecol J* 2015 Dec;26(12):1725–34.
- [2] Verghese TS, Champaneria R, Lapoor DS, Latthe PM. Obstetric anal sphincter injuries after episiotomy: systematic review and meta-analysis. *Int Urogynecol J* 2016 Feb 19.
- [3] de Vogel J, van der Leeuw-van Beek A, Gietelink D, Vujkovic M, de Leeuw JW, van Bavel J, Papatsonis D. The effect of a mediolateral episiotomy during operative vaginal delivery on the risk of developing obstetrical anal sphincter injuries. *Am J Obstet Gynecol* 2012 May;206(5):404.

<http://dx.doi.org/10.1016/j.ejogrb.2017.01.032>

7

Is evacuation proctography still the gold standard for the diagnosis of posterior compartment pelvic floor disorders?

Isabelle van Gruting^{1,*}, Aleksandra Stankiewicz², Kirsten Kluivers³, Helena Blake², Ranee Thakar¹, Abdul Sultan¹

¹ Croydon University Hospital, Obstetrics and Gynaecology, Croydon, United Kingdom

² Croydon University Hospital, Radiology, Croydon, United Kingdom

³ Radboud University Medical Centre, Obstetrics and Gynaecology, Nijmegen, Netherlands

Introduction and aim of the study: Evacuation proctography (EP) has been regarded as the gold standard for the diagnosis of posterior pelvic floor disorders. Magnetic Resonance Imaging (MRI), transperineal ultrasound (TPUS) and endovaginal Ultrasound (EVUS) are less invasive, avoid ionizing radiation and provide a three compartment assessment. Our aim was to establish the accuracy of four imaging techniques and determine if ultrasound/MRI could substitute EP.

Materials and methods: Prospectively, 131 women with symptoms of obstructed defecation syndrome underwent all four imaging techniques. Target conditions under evaluation were rectocele, enterocele, intussusception, anismus and pelvic floor descent. Findings were dichotomised into present or absent. Images were assessed independently by two observers blinded to clinical and other imaging findings. Discrepancies were resolved by a tertiary observer. EP was assumed to be an imperfect gold standard. Latent Class Analysis was used as is regarded the best statistical test in the absence of a gold standard [1].

Results: MRI and TPUS were better in diagnosing rectocele compared to EP (sensitivity 1.00; 0.92 vs. 0.50). All four were equally good in diagnosing enterocele (sensitivity 0.43;0.38; 0.47;0.79). EP was best in diagnosing intussusception (sensitivity 0.67 vs. 0.14;0.07;0.34). EVUS was best in diagnosing anismus (sensitivity

1.00 vs. 0.33;0.34;0.61). MRI and EP were equally good in diagnosing pelvic floor descent (sensitivity 0.95;0.92 vs. 0.35;0.20).

Interpretation of results: MRI could substitute EP for the diagnosis of rectocele, enterocele and pelvic floor descent, due to its excellent tissue discrimination. EP remains the preferred technique to diagnose intussusception. EVUS is a valuable tool for diagnosis of anismus.

Conclusions: This is the first study to assess the accuracy of four imaging techniques, showing EP is no longer the best available. MRI and ultrasound could to substitute EP for specific conditions and therefore the best imaging modality for each patient should be selected based on symptoms and suspected condition.

Reference

- [1] Rutjes, et al. Evaluation of diagnostic tests when there is no gold standard. A review of methods. *Health Technol Assess* 2007;11(50), iii,ix-51.

<http://dx.doi.org/10.1016/j.ejogrb.2017.01.033>

8

Pelvic floor muscle strength in the postpartum period of women with history of obstetric anal sphincter injuries

Cristina Ros^{1,*}, Eva Martínez-Franco², Giulio Aniello Santoro³, Maria José Palau¹, Pawel Andrej Wieczorek⁴, Montserrat Espuña¹

¹ Hospital Clinic Barcelona, Hospital Clinic/University of Barcelona/Pelvic Floor Unit, Barcelona, Spain

² Parc Sanitari Sant Joan de Déu, Gynecology, Sant Boi del Llobregat, Barcelona, Spain

³ Pelvic Floor Unit, F^o Department of Surgery, Treviso Regional Hospital, Treviso, Italy

⁴ Department of Pediatric Radiology, Medical University of Lublin, Lublin, Poland

Introduction and aim of the study: According with the Green Top Guidelines of the RCOG [1], women with history of obstetric anal sphincter injuries (OASIS) should be advised that physiotherapy could be beneficial.

The aim of the study was to evaluate the pelvic floor muscles (PFM) strength in the postpartum period of a cohort of women with history of OASIS.

Materials and methods: Voluntary PFM contraction and relaxation was evaluated at 6 months postpartum by vaginal palpation, and scored according to the Modified Oxford Grading Scale (MOS) [2]. Additionally, MOS score was dichotomized in $MOS \leq 2$ (underactive/non-functioning) and $MOS \geq 3$ (normal).

Results: 95 females with OASIS identified and repaired intrapartum were included. 56 women (59%) presented an underactive/non-functioning PFM. No statistically significant differences were found between these patients and patients with normal PFM, considering newborn weight or degree of OASIS. A higher percentage of patients who delivered with forceps, showed a weak PFM strength, compared with women who delivered spontaneously ($p = 0.04$). Furthermore, participants who delivered spontaneously presented a higher MOS than those who delivered with forceps (mean value 2.4 ± 1.3 versus 1.9 ± 1.1 , respectively; $p = 0.04$). Considering age, there was a statistically significant negative correlation between ages and MOS score ($p = 0.04$, Spearman's correlation). No statistically significant differences were observed in MOS when comparing to different degrees of OASIS. Mean and SD for 3a, 3b, 3c and 4 were 2.0 ± 1.3 ; 2.3 ± 1.2 ; 2.6 ± 0.9 ; 2.0 ± 1.4 , respectively.