

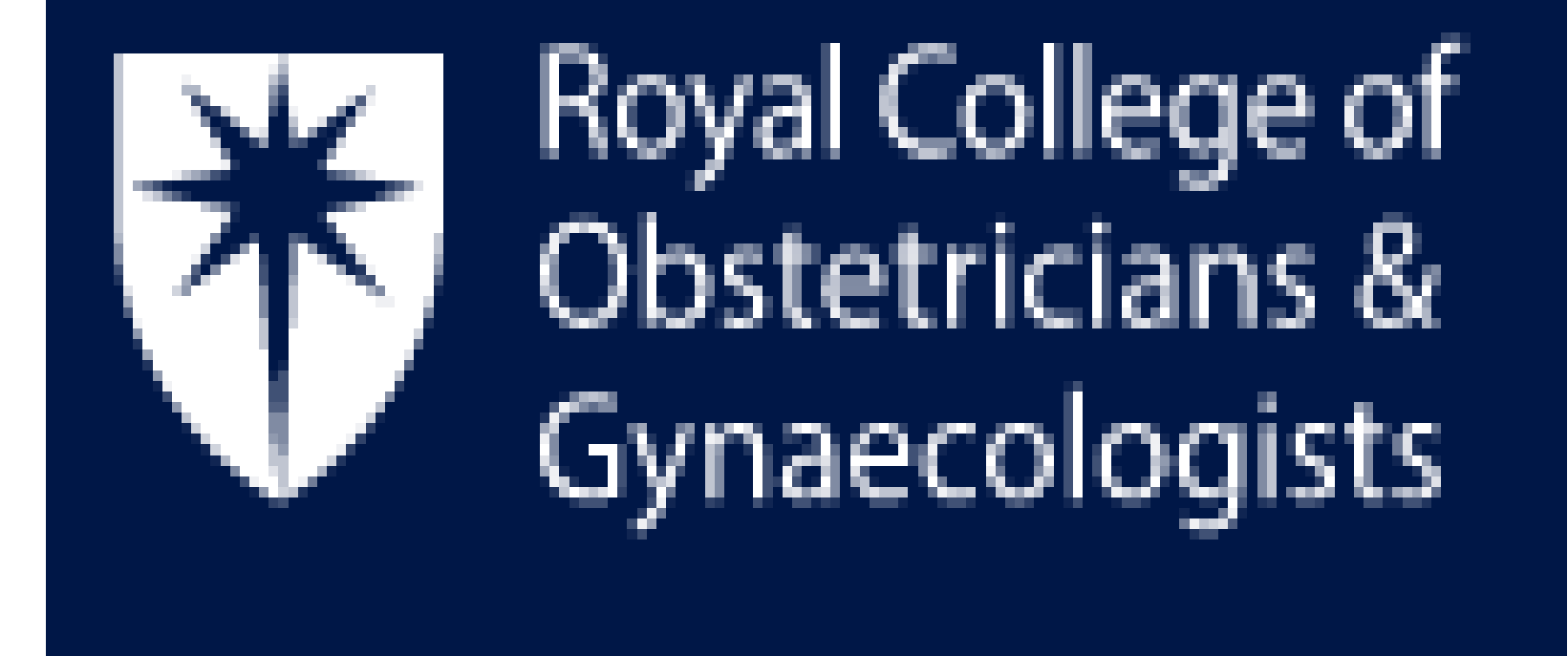


Diagnosis of anal sphincter injury by transperineal ultrasound: Technique, reliability and benefits

Gharbia N^{1,2}, Halouani A^{1,2}, Triki A¹, Ben Amor A^{1,2}

1. Department of gynecology and obstetrics, Mongi slim hospital, Tunis, Tunisia

2. Research laboratory LR18SP05



Poster n: 622

Introduction :

Transperineal ultrasound is a new approach to the examination of the anal sphincter.

The aim of our work is to evaluate the technique, reliability and benefits of transperineal ultrasound in the diagnosis of the injury of the anal sphincter.

Methods :

We conducted a longitudinal, monocentric and descriptive study over a period of 4 months (from 01/01/2021 to 01/01/2021) in the gynecology and obstetrics department of the Mongi Slim hospital, La Marsa.

During transperineal ultrasound, the anal sphincter is explored by the vaginal probe.

Results :

We examined 61 women. The average age of the patients was 37 years. Of the women studied, 16 women (26.2%) were nulligravida and 21 women (46%) had never given birth by caesarean section.

Ultrasound lesions of the anal sphincter (ULAS) were found in 54% of cases: Discontinuity of the anal sphincter (13%), Thinning of the internal anal sphincter (IAS) (25%), Asymmetry and thickening of the external anal sphincter (EAS) (10%) and Mucosal star anomaly (35%).

Anal fissures are an independent risk factor (RF) for the occurrence of EAS asymmetry and thickening (OR=10.22; RR=1.38; p=0.004) and a RF for the occurrence of ULAS (OR=3.6; RR=2.25; p=0.06).

Hemorrhoids were an independent RF for the occurrence of asymmetry and thickening of the EAS (OR=6.46; RR=1.24; p=0.02). Chronic constipation was an independent RF for the occurrence of asymmetry and thickening of the EAS (OR=9.47; RR=1.22; p=0.02) and a RF for the occurrence of ULAS (OR=2.35; RR=1.62; p=0.11).

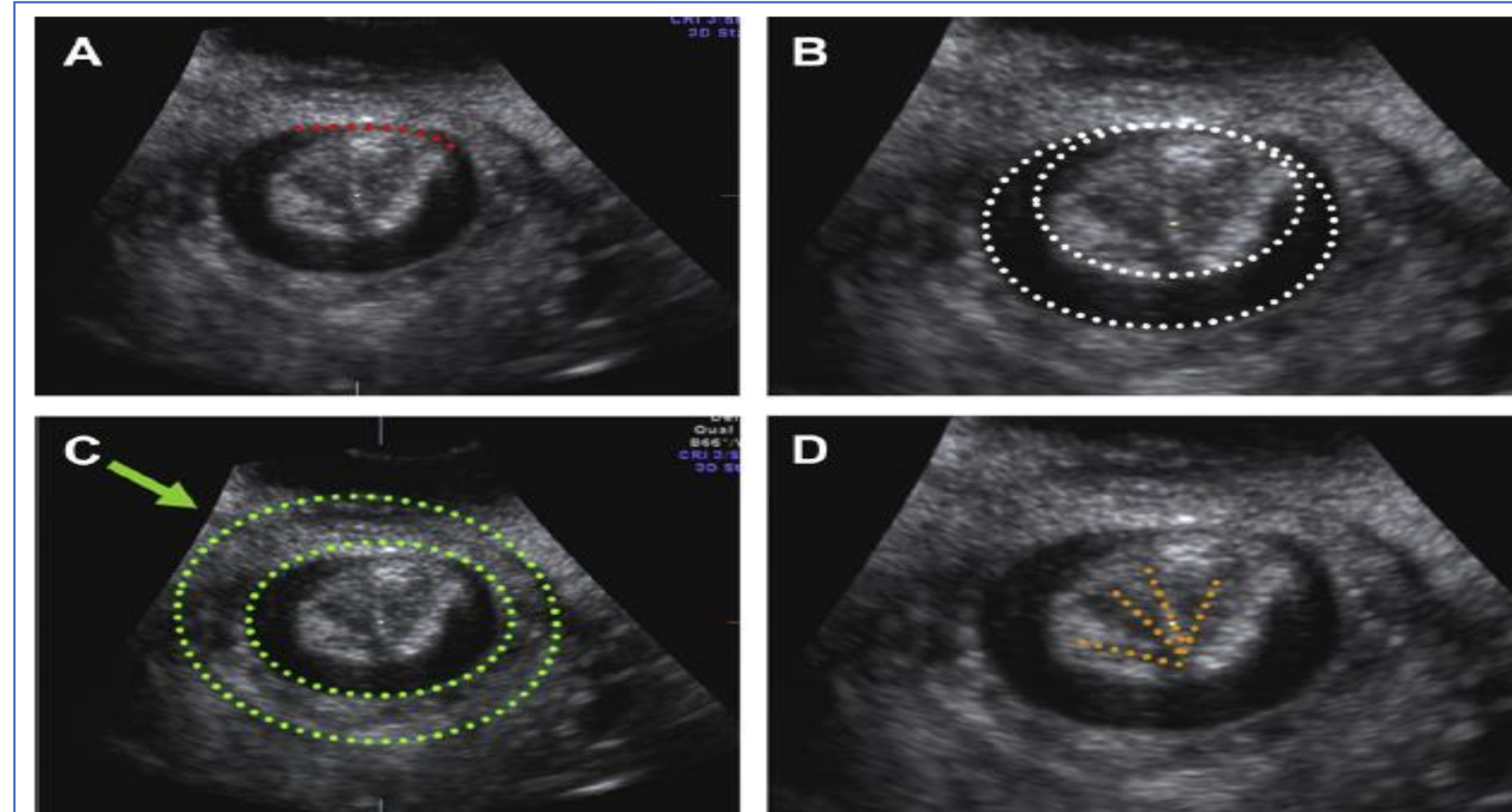


Figure : *ultrasound lesion of the anal sphincter*
(A) *Discontinuity of the anal sphincter ;*
(B) *Thinning of the internal anal sphincter;*
(C) *Asymmetry and thickening of the external anal sphincter ;*
(D) *Mucosal star anomaly*

Regarding the mode of delivery, vaginal delivery is a RF for the occurrence of ULAS (OR=1.41; RR=1.2; p=0.5). Our study concluded that the use of episiotomy was a protective factor against the occurrence of ULAS (OR=0.83; RR=0.88). While vulvovaginal tears were a RF for the occurrence of ULAS (OR=2.4; RR=1.7). The occurrence of ULAS was associated with an increased rate of rectal syndrome and anal incontinence (OR=2; RR=1.17 in both cases).

Discussion :

Our findings suggest that transperineal ultrasound is useful in the diagnosis of ASL in asymptomatic women. However, no ultrasound sign studied was an independent risk factor for the occurrence of rectal syndrome or anal incontinence.

The best time to perform transperineal ultrasound is eight to 12 weeks after delivery to avoid overestimation of lesions by perineal oedema.

Conclusion :

Transperineal ultrasound is an effective and accessible technique for the detection of ULAS. It should be part of the postpartum check-up.