

# ULTRASSONOGRAFIA TRANSVAGINAL EM UROGINECOLOGIA

Alessa Machado

Médica Urologista – TiSBU

Professora Membro da Disciplina de Urologia Feminina do Departamento de Disfunções  
Miccionais da Sociedade Brasileira de Urologia 2022/23

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## • UROGINECOLOGIA

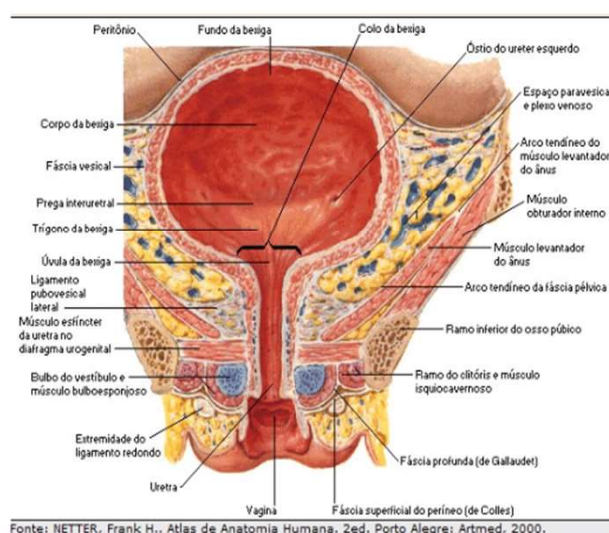
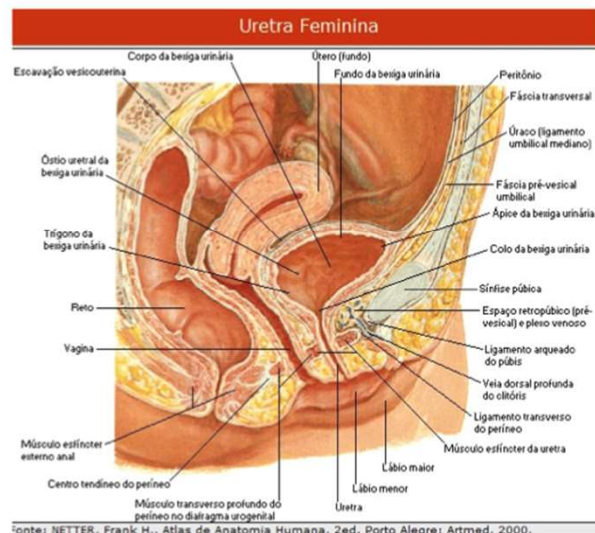
( UROLOGIA FEMININA / CIR. PÉLVICA  
RECONSTRUTIVA)

**Disfunções do assoalho pélvico e trato  
urinário inferior**

- INCONTINÊNCIA URINÁRIA
- BEXIGA HIPERATIVA
- ITU RECORRENTE
- SINDROMES DOR PÉLVICA CRÔNICA;
- PROLAPSO DE ÓRGÃO PÉLVICO
- MASSAS VAGINAIS/ PERIURETRAIS
  - TUMORES OU CISTOS VAGINAIS E URETRAIS
  - DIVERTICULO URETRAL
- TRAUMA PERINEAL
- FÍSTULAS UROGENITAIS
- ANOMALIAS CONGÊNITAS – MULLERIANA/ FUSÃO
- INCONTINÊNCIA FECAL / INJÚRIA ESFINCTER ANAL

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## Lesões uretrais / parauretrais

- Diagnóstico desafiador – várias entidades clínicas – sintomatologia inespecífica
- Benignas x Malignas – (cistos parauretrais (Skene), divertículo uretral; carúncula; leiomioma; cistos vaginais – Gartner, cisto mulleriano, cisto de inclusão; endometrioma; ureter ectópico; cisto de glândula de Bartholin; entre outros; HPV e carcinoma primário de uretral
- RM x US

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## US x URETRA

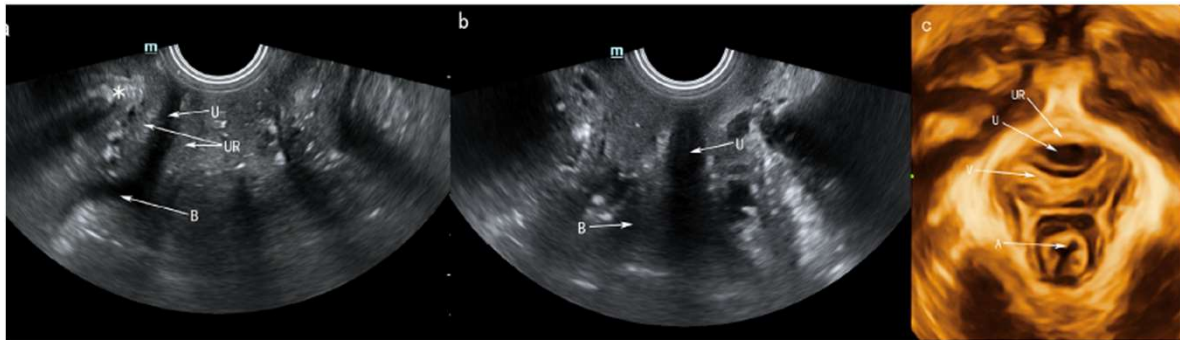


Fig. 2. Transvaginal scan of the female urethra and peri-urethral tissues. (a) Longitudinal and (b) coronal sections of the urethra; (c) 3-D reconstruction depicting the urethra, vagina and anus from the ventral to the dorsal aspect at the optimal transverse plane. The asterisk marks the arcuate ligament of the pubis. U = urethra; B = bladder; UR = urethral rhabdosphincter; V = vagina; A = anus.

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## LESÕES PERIURETRAIS



ARQUIVO PESSOAL



CISTO PARAURETRAL (SKENE)

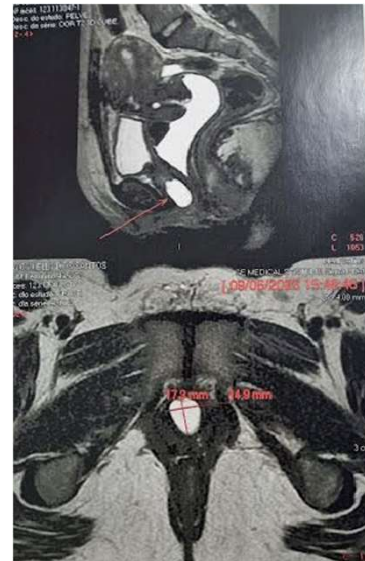
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## LESÕES PERIURETRAIS

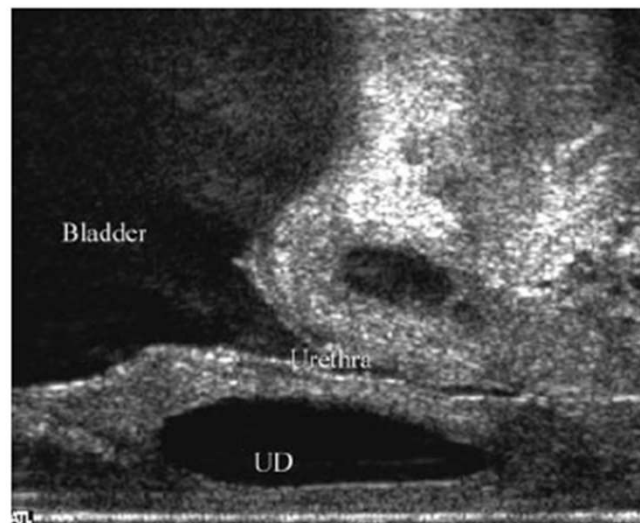


ARQUIVO PESSOAL

Divertículo uretral topografia mediana  
adjacente uretra 1,5x 1,7x 2,3cm

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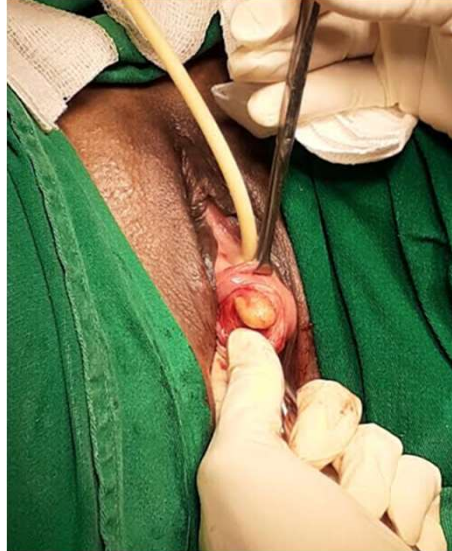
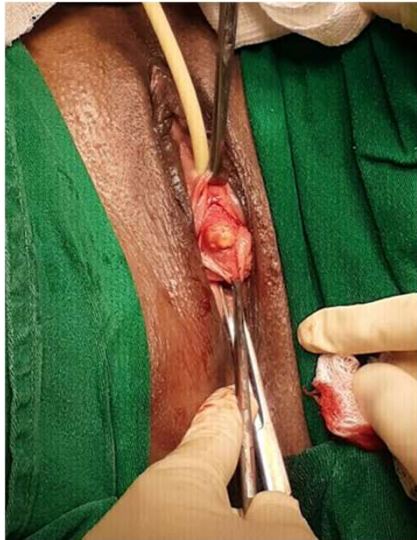


**FIGURE 1.** Urethral diverticulum (case 2). Midsagittal TVUS sonogram shows the urethral diverticulum (UD) posterior to the urethra (U). B, bladder.

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# gestus LESÕES PERIURETRAIS



Cisto  
parauretral

ARQUIVO PESSOAL

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<https://doi.org/10.1016/j.ultrasmedbio.2020.03.024>

## ● Original Contribution

### ULTRASONOGRAPHIC IMAGING FEATURES OF FEMALE URETHRAL AND PERI-URETHRAL MASSES: A RETROSPECTIVE STUDY OF 95 PATIENTS

HUA YANG, JIAO-JIAO GU, LUO JIANG, JIE WANG, LIN LIN, and XIN-LU WANG

Department of Ultrasound, Shengjing Hospital of China Medical University, Shenyang, Liaoning Province, Republic of China

(Received 14 January 2020; revised 11 March 2020; in final form 24 March 2020)

95 mulheres com lesões periuretrais (císticas, sólidas ou mistas) – US transvaginal ou perineal - a Philips iU22 xMATRIX, Mindray Resona 8 or Medison Accuvix XQ US system using a 7.5-MHz transvaginal probe or 4- to 13- MHz linear probe

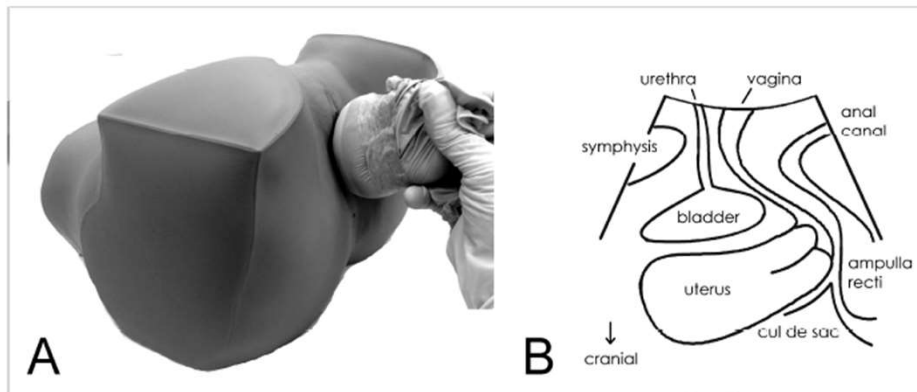
Table 1. Final diagnoses of patients with urethral and peri-urethral masses

Diagnosis	No. of patients	%
Urethral diverticulum	39	41.1
Para-urethral cyst	33	34.7
Urethral leiomyoma	12	12.6
Urethral caruncle	7	7.4
Urethral caruncle with malignant transformation	1	1.1
Urethral squamous cell carcinoma	1	1.1
Urethral adenocarcinoma	1	1.1
Urethral condyloma	1	1.1

N refers to the number of patients.

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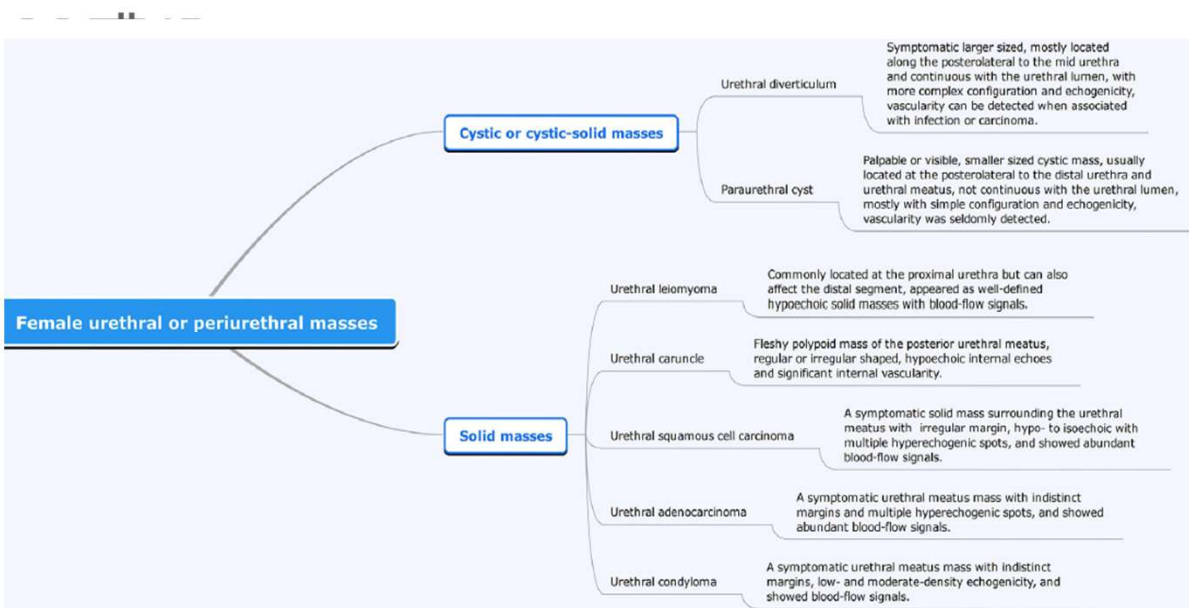
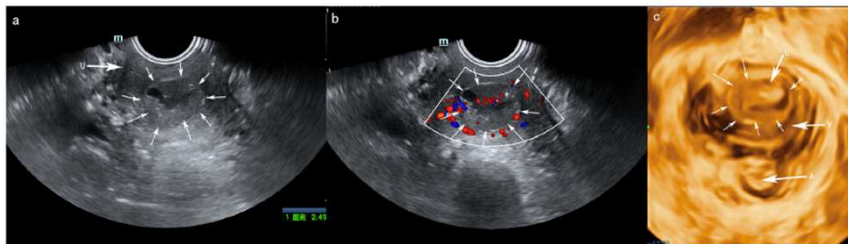


Fig. 7. Sonographic characteristics of female urethral and peri-urethral masses.

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divertículo uretral  
complexo

Fig. 3. 2-D and 3-D transvaginal ultrasound revealing imaging features of a peri-urethral mass in a woman with a suspected diagnosis of urethral diverticulum complicated with infection. (a) On 2-D transvaginal ultrasound, a cystic-solid mass (arrows) was seen originating from the posterior wall of the mid-urethra, containing hyper-echogenic spots and calculi. (b) Color Doppler imaging revealed abundant blood flow signals. (c) Three-dimensional reconstruction (transverse plane) revealed that the mass (arrows) was almost surrounding the urethra. U = urethra; V = vagina; A = anus.

Cisto parauretral

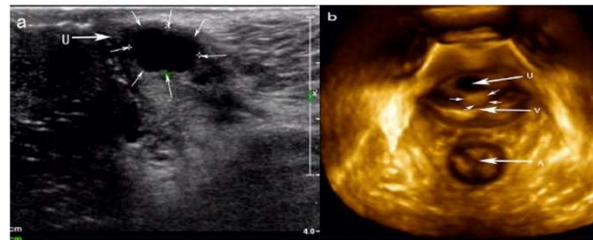
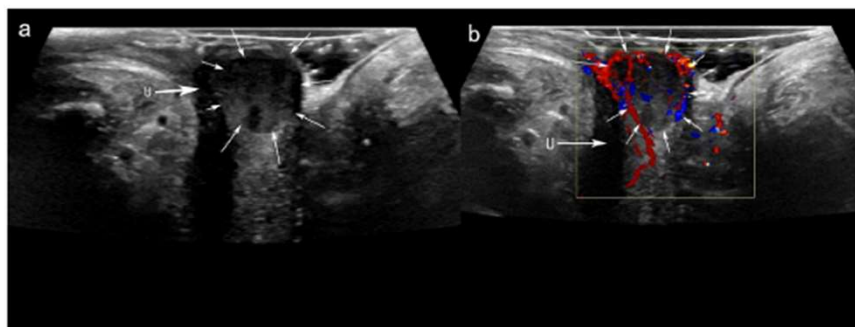


Fig. 4. 2-D and 3-D transperineal sonography revealing imaging features of a peri-urethral mass in a woman with a suspected diagnosis of para-urethral cyst. (a) On 2-D transperineal ultrasound, a cystic anechoic mass (arrows) was seen originating from the posterior wall of the urethral meatus. (b) 3-D reconstruction (transverse plane) confirmed that the mass (arrows) arose from the posterior urethral wall. U = urethra; V = vagina; A = anus.

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Leiomioma  
uretral

Fig. 5. 2-D transperineal sonography depicting imaging features of a peri-urethral mass in a woman with a suspected diagnosis of urethral leiomyoma. (a) On 2-D transperineal ultrasound, a well-defined solid hypo-echoic mass (arrows) was seen originating from the posterior wall of the urethral meatus. (b) Color Doppler imaging revealed abundant blood flow signals. U = urethra.

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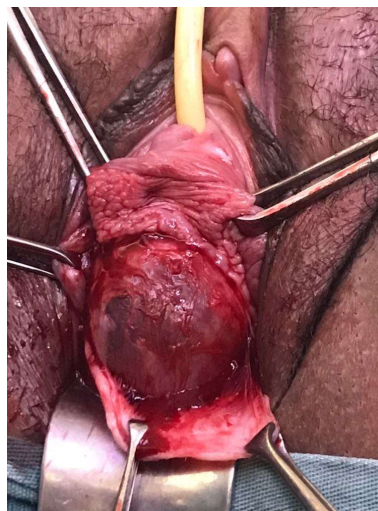
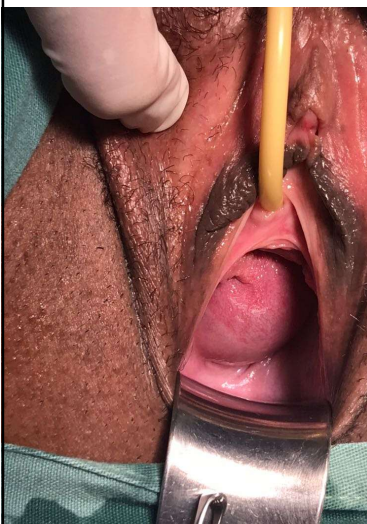
US transvaginal e perineal 2D parecem efetivos na detecção de massas uretrais e periuretrais, identificando características morfológicas, enquanto reconstrução em 3D visualiza melhor relação com uretra, vagina e outras estruturas, para planejamento preoperatório. Houve correlação boa com achados operatórios e anatomopatológicos.



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## CISTOS VAGINAIS



ARQUIVO PESSOAL



AP. CISTO DE GARTNER

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Figure 1. There is a bulky mass in antero-lateral vaginal wall, with urethral deviation.



Figure 2. Aspect of Gartner cyst in a cut section

ESCUDERO, 2014

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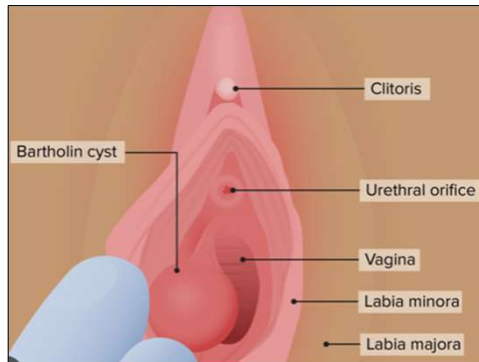


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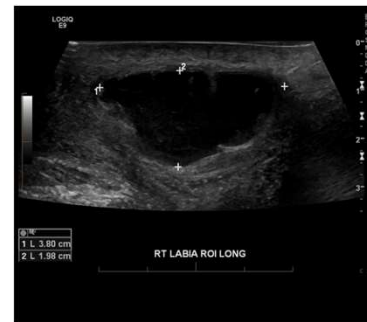


Cisto de inclusão parede vaginal anterior

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Cisto de Bartholin



Cystic mass to the right of the introitus in the labium with internal echoes and increased vascularity in surrounding soft tissues

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### Assessment of pelvic floor muscle contractility: digital palpation versus 2D and 3D perineal ultrasound

Stefan Albrich <sup>1</sup>, Joscha Steetskamp <sup>2</sup>, Sophie-Luise Knoechel <sup>2</sup>, Saskia Porta <sup>2</sup>, Gerald Hoffmann <sup>2</sup>, Christine Skala <sup>2</sup>

Affiliations + expand

PMID: 26408007 DOI: 10.1007/s00404-015-3897-5

### The prevalence of abnormal posterior compartment anatomy and its association with obstructed defecation symptoms in urogynecological patients

Rodrigo Guzman Rojas , Ixora Kamisan Atan, Ka Lai Shek & Hans Peter Dietz

*International Urogynecology Journal* **27**, 939–944 (2016) | [Cite this article](#)

Review > Best Pract Res Clin Obstet Gynaecol. 2019 Jan;54:12-30.

doi: 10.1016/j.bpobgyn.2018.06.006. Epub 2018 Jun 28.

### Ultrasound in the assessment of pelvic organ prolapse

Hans Peter Dietz <sup>1</sup>

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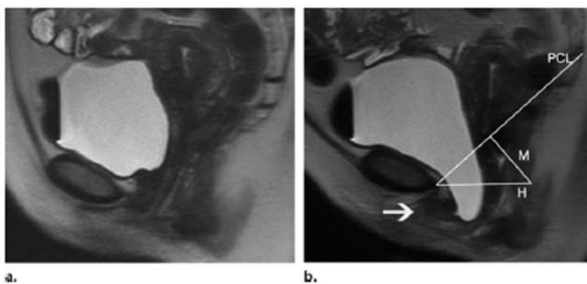


Arquivo pessoal

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## PROLAPSOS GENITAIS



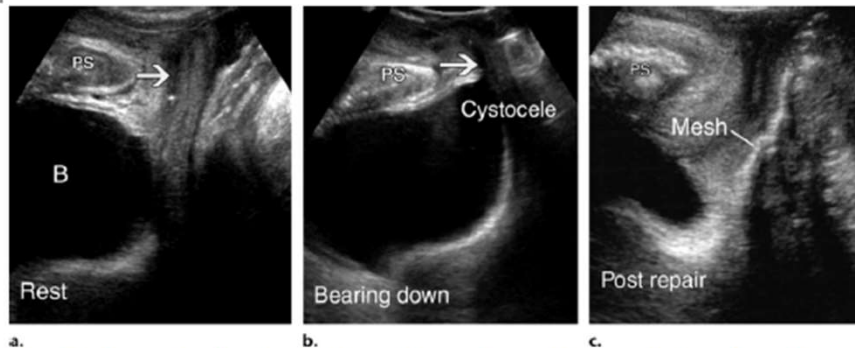
**Figure 19.** Grade 1 pelvic floor relaxation and descent, grade 2 cystocele, urethrocele, and urethral hypermobility in a 46-year-old multiparous woman with urinary frequency and urgency, constipation, and pelvic pain. Midsagittal single-shot fast SE MR images obtained with the patient at rest (**a**) and straining (**b**) demonstrate an anteroposterior hiatal dimension (H line) of 6.1 cm and a pelvic floor descent (M line) of 2.0 cm, findings that are consistent with grade 1 pelvic floor relaxation and descent. The bladder is 3.1 cm below the H line (consistent with a grade 2 cystocele), and the urethra is below the H line (consistent with a urethrocele). Urethral hypermobility is noted due to the horizontal configuration of the urethra during straining (arrow in **b**).

Grade	Hiatal Enlargement (cm)	Pelvic Floor Descent (cm)
0 (Normal)	<6	0–2
1 (Mild)	6–8	2–4
2 (Moderate)	8–10	4–6
3 (Severe)	≥10	≥6

Grade	Organ Location Relative to H Line
0 (No prolapse)	Above
1 (Mild)	0–2 cm below
2 (Moderate)	2–4 cm below
3 (Severe)	≥4 cm below

CHAUDHARY, 2010

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**Figure 20.** Cystourethrocele and urethral hypermobility in a 50-year-old woman with a 4-year history of urinary incontinence. **(a)** Dynamic translabial US image obtained with the patient at rest shows a normally positioned urethra (arrow) and bladder (B). PS = pubic symphysis. **(b)** On a dynamic translabial US image obtained with the patient straining, the urethra (arrow) and bladder extend caudal to the inferoposterior aspect of the pubic symphysis (PS), a finding that is consistent with a cystourethrocele. **(c)** US image obtained after surgical repair demonstrates a mesh posterior to the proximal urethra, without evidence of a cystocele. PS = pubic symphysis.

CHAUDHARY, 2010

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## US X UROGINECOLOGIA

- Acessibilidade / baixo custo;
- Evolução tecnológica – transdutores de superfície e intracavitários de alta resolução + aquisição tridimensional ;
- Ferramenta diagnóstica / planejamento pré-operatório;
- Aplicabilidade em várias condições uroginecológicas
- Operador dependente – experiência e atualização constantes

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OBRIGADA!

CONTATO: [alessamachado.urologista@gmail.com](mailto:alessamachado.urologista@gmail.com)

[www.gesttus.com.br](http://www.gesttus.com.br)