

Not everything is as it seems: the role of transvaginal Doppler in the differential diagnosis of endometriotic lesions

AUTHORS: G.Picco, J.R. Marucco, A. Rivera, S. Gimenez, F.A. Gonzalez, J. Granel, C. Catalan.

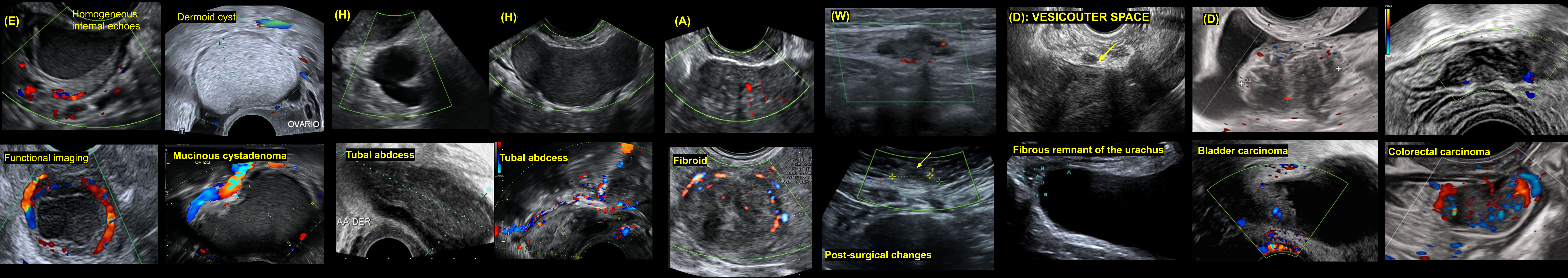
ABSTRACT: Usefulness of Transvaginal Doppler (TVD) for differentiating endometriotic lesions from other conditions that mimic their imaging characteristics, in order to identify specific criteria that help reduce false positives in the diagnosis of this pathology.

DIFFERENTIAL DIAGNOSIS

ENDOMETRIOMA (E)	HYDRO/HEMATOSALPINX (H)	EXTERNAL ADENOMIOSIS (A)	ABDOMINAL WALL (W)	DEEP FOCI (D)
-Functional imaging -Dermoid cyst -Mucinous cystadenoma	-Tubal abdcess (PID)	-Fibroids	-Post-surgical changes	-Lesions of hollow organs, anterior and posterior compartments

IMAGING PEARLS

(E): Homogeneous internal echoes, No solid component, Negative Doppler
-**Functional imaging**: Internal reticular echoes, Peripheral vascularization. Follow-up in 8-12 weeks (postmenstrual phase).
-**Dermoid cyst**: Hyperechoic, without vascularization (except for the Rokitansky nodule).
-**Mucinous cystadenoma**: Homogeneous internal echoes.
(H): Tubular structure with anechoic content or with homogeneous low-level internal echoes, thin walls, negative Doppler.
-**Tubal abdcess (PID)**: Clinical and laboratory findings, Heterogeneous low-level internal echoes, Edema of the fallopian tube wall with mural hyperemia on Doppler.
(A): Heterogeneous area of the external myometrium, with irregular borders.
-**Fibroid**: Circumscribed borders, Iso/hypoechogenic, Mild peripheral Doppler
(W): Circumscribed borders, Iso or hypoechogenic, Mild Doppler.
-**Post-surgical changes**: Linear hypoechoic band (fibrous adhesion tissue), with no mobility.
(D): Hypoechoic plaques, nodules or thickened areas, Regular or spiculated contours, Little or no vascularization on Doppler examination, +/- Cystic areas of blood content.
-**Fibrous remnant of the urachus**: Pseudonodular or medial triangular structure at the apex of the bladder, at the insertion of the urachus. Muscular layer intact.
-**Bladder/ Colorectal carcinoma**: Polypoid lesions, originating in the mucosa and invading the inner layers. Positive Doppler.



CONCLUSION

A comprehensive understanding of the specific imaging criteria for endometriosis and its differential diagnoses is essential. The correct interpretation of the findings, combined with clinical data, is key to ensuring accurate diagnosis and treatment.