

Sonographic Features of Adenomyosis and Its Association with Menstrual Symptoms in Filipino Women at a Tertiary Hospital: A 5-Year Retrospective Review

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OBJECTIVES

Specific ultrasound features of adenomyosis are associated with patient’s clinical presentation, which may vary with ethnicity. This study aims to determine ultrasound features among Filipino women with histopathologic diagnosis of adenomyosis using Morphological Uterus Sonographic Assessment (MUSA) descriptors and associate it with their clinical profile and symptoms.

METHODS

This is retrospective review of women who underwent total abdominal hysterectomy at the tertiary hospital with histopathologic diagnosis of adenomyosis. Demographic information and clinical data were obtained. Ultrasound results and images were reviewed and described using MUSA descriptors. Descriptive statistics were used to describe demographic data. Rank Biserial Correlation Coefficient and Fisher’s Exact Test were used to associate the sonographic features with the clinical factors. Level of significance was set at $p < 0.05$.

RESULTS

Among the 139 patients included in this study, most were aged 45 (60.4%) and multipara (65.5%). Patients presented with abnormal uterine bleeding (77%) and pelvic pain/dysmenorrhea (36.0%). The most common sonographic features present were globular uterus, asymmetric myometrial thickening, and fan-shaped shadowing. Fan-shaped shadowing was significantly associated with pelvic pain/dysmenorrhea (p-value 0.013). Pelvic pain was also significantly associated with presence of endometrioma (p-value 0.000) and infertility (p-value 0.032).

CONCLUSION

The study highlighted the association between sonographic features of adenomyosis with specific symptoms, suggesting a potential avenue for treatment strategies and further research. Fan-shaped shadowing strongly associated with pelvic pain/dysmenorrhea. Additionally, the presence of endometrioma and its association with pelvic pain and infertility were observed, emphasizing the complex interplay between adenomyosis and endometriosis.

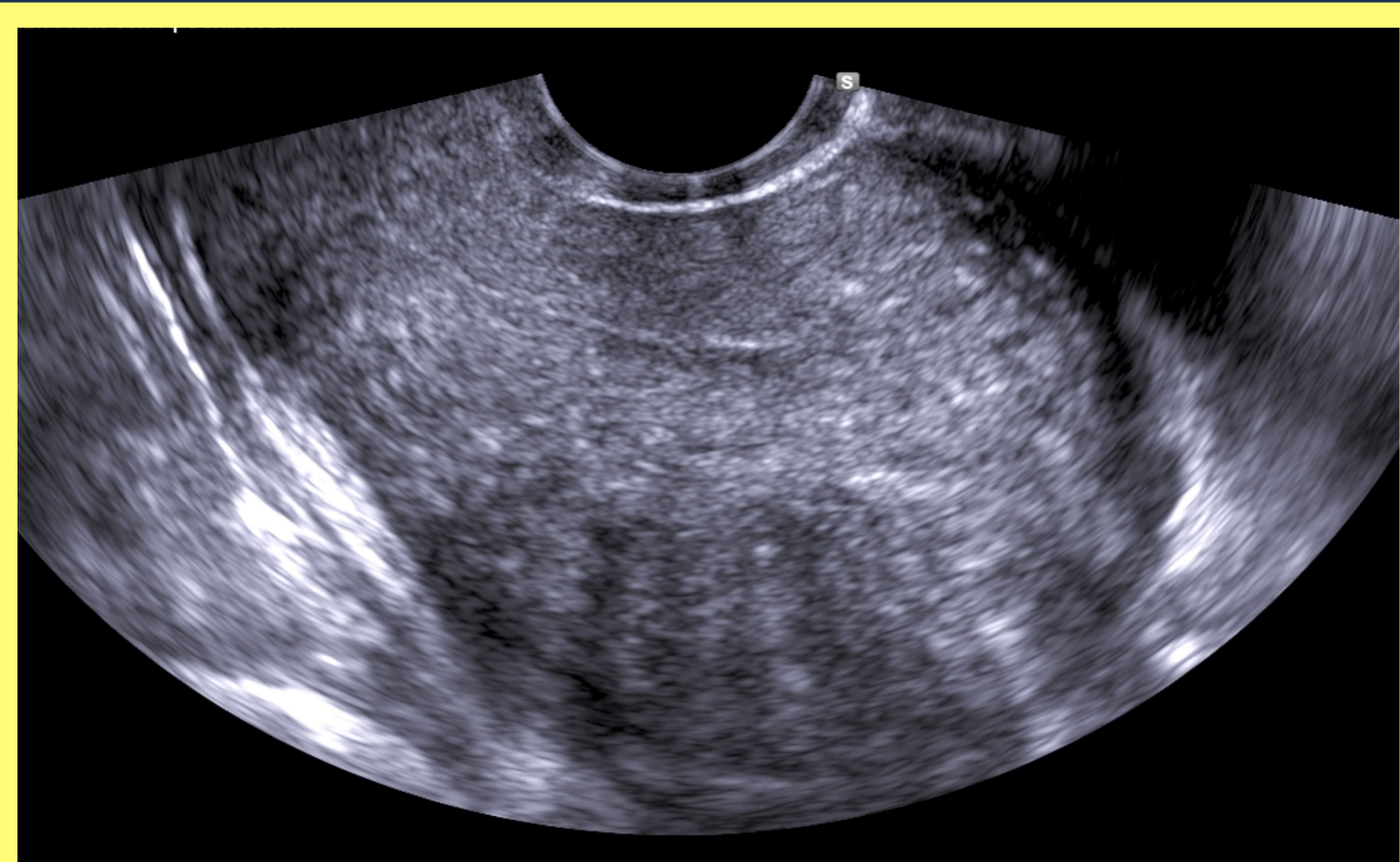


Figure 1. Globular uterus

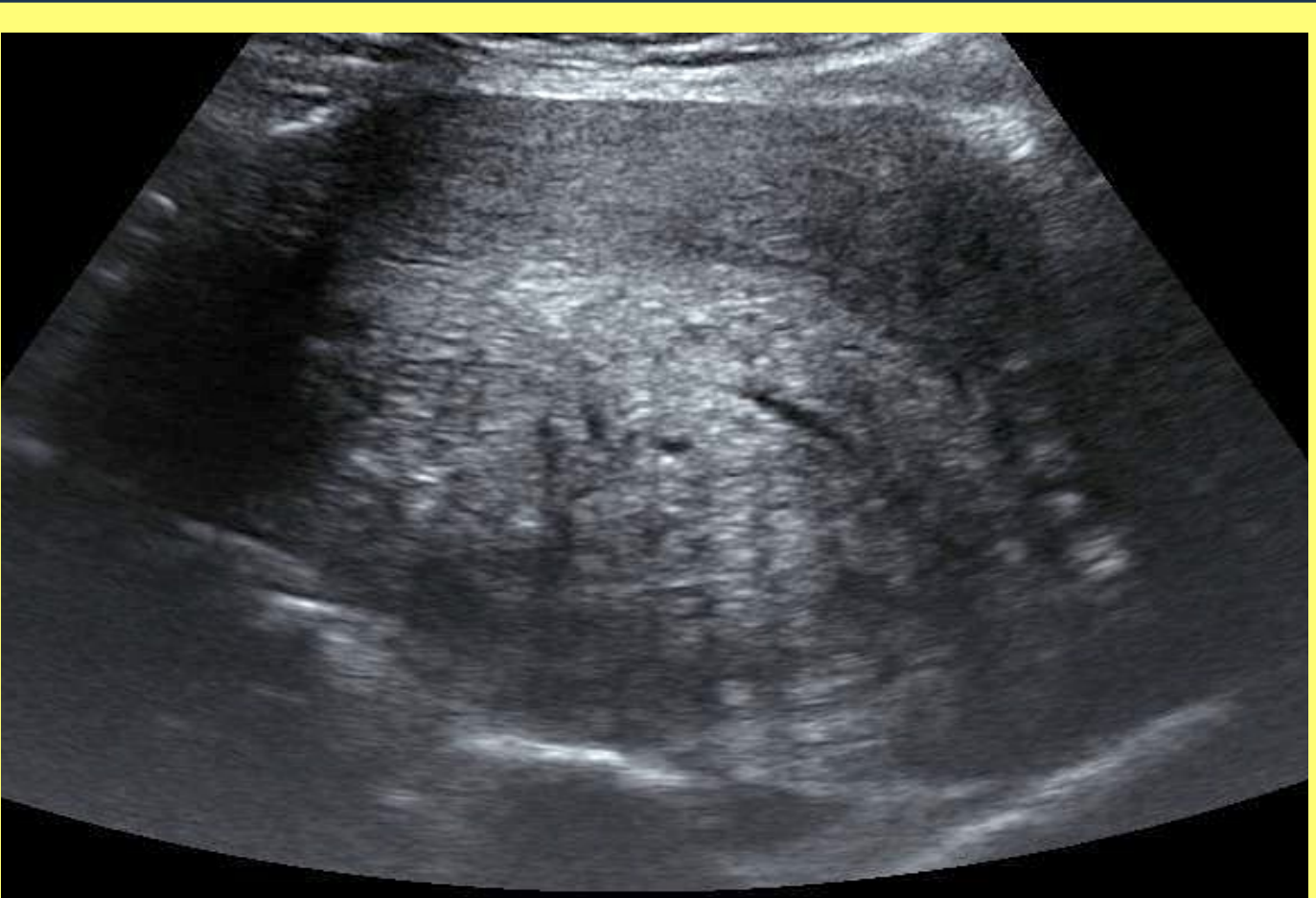


Figure 2. Fan-shaped shadowing

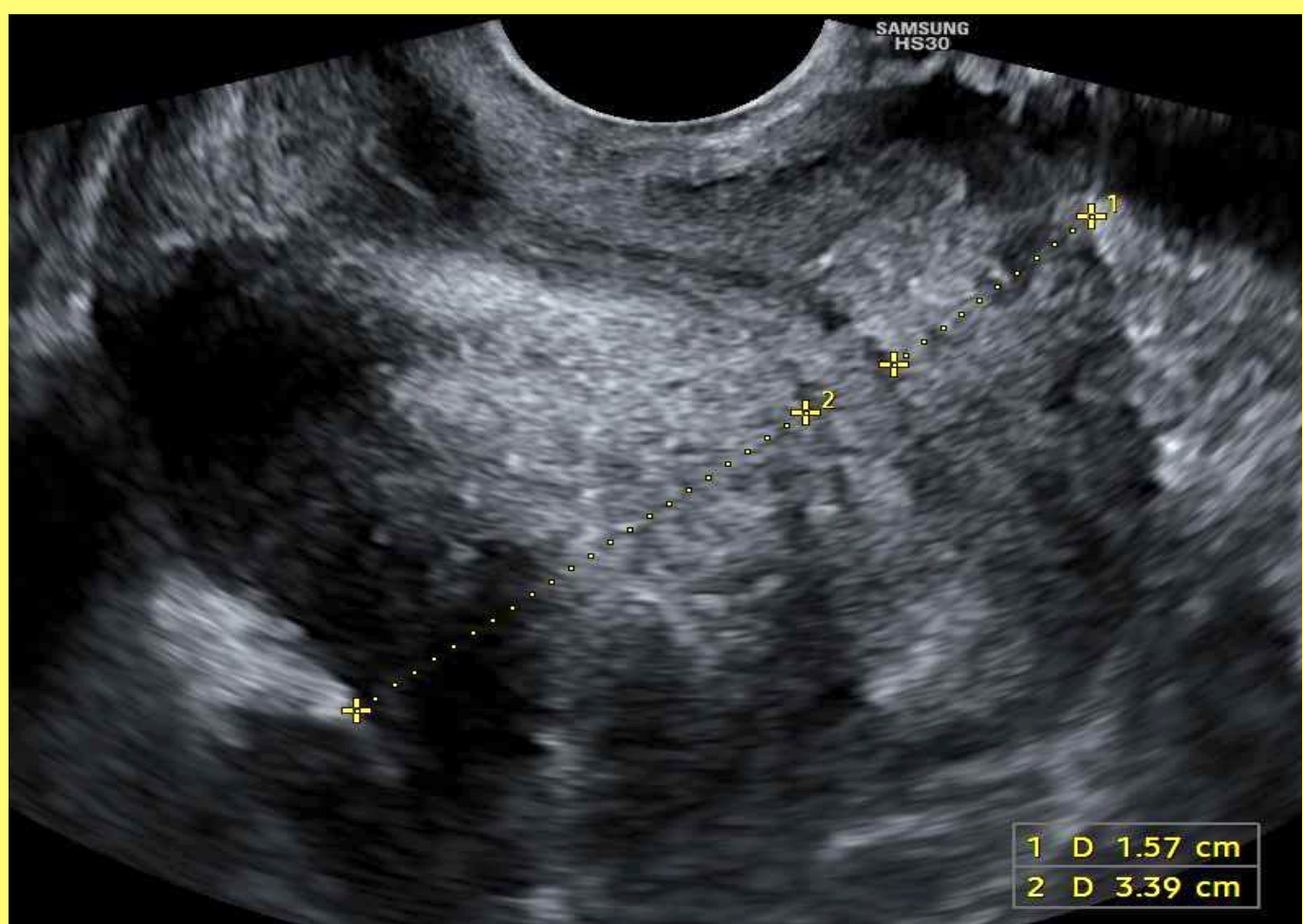


Figure 3. Asymmetric myometrial thickening

Sonographic Features of Adenomyosis	Pelvic Pain/ Dysmenorrhea p value	Abnormal Uterine Bleeding p value	Infertility p value
Myometrial cysts	0.570	0.522	0.746
Hyperechogenic islands and cysts	0.330	0.454	0.205
Echogenic sub-endometrial lines and buds	1.000	1.000	0.014*
Asymmetrical myometrial thickening	0.112	0.314	0.075
Fan-shaped shadowing	0.013*	0.310	0.002*
Globular uterus	0.051	1.000	0.070
Translesional vascularity	0.572	0.191	0.761
Irregular junction zone	0.822	0.797	0.314
Interrupted junctional zone	1.000	0.595	0.437
Presence of concomitant endometrioma	0.000*	1.000	0.001*

Table 1. r_{rb} (Rank Biserial Correlation Coefficient)
*Significant at $p < 0.05$