Magnetic resonance imaging (MRI) of abdominal wall endometriosis clinically and sonographically mimicking a tumor
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CLINICAL HISTORY: A 38-year-old lady presented with insidious onset of a left anterior lower abdominal mass next to the Caesarean scar for 7 years. Physical examination found a 3-cm hard tender mass at the left anterior abdominal wall

ULTRASOUND FINDING (Figure 1): A MARKEDLY HYPOECHOIC subcutaneous MASS with irregular contour (yellow arrowhead) and mildly increased color Doppler signals (purple arrows) indenting the left rectus abdominis muscle (green arrows)

MRI FINDINGS: Small foci demonstrating blooming artifact on gradient recalled echo sequence (orange arrows, Figure 2), T1 hyperintense signals on the fat-suppressed sequence (red arrows, Figure 3) and moderate contrast enhancement within the lower anterior abdominal mass (yellow arrowheads, Figure 4) which abutted the left rectus abdominis muscle and corresponded to the site of the clinically and sonographically detected mass

CYTOLOGICAL EXAMINATION: FINDINGS (Figure 5) Strips of glandular epithelium accompanied by endometrial-type stroma being positive for estrogen receptor. The overall features are consistent with endometriosis

DISCUSSION: Abdominal wall is an atypical site of endometriosis. Although the ultimate diagnosis requires histological examinations, imaging is helpful in localization and characterization of the disease. MRI is more specific than ultrasound and physical examination in evaluation of abdominal wall endometriosis. Characteristic MRI features are HYPERINTENSE contents on fat-suppressed T1&2 weighted images and blooming artifact on gradient recalled sequence, which suggest the presence of methemoglobin and hemosiderin respectively and help excluding fat-containing diseases such as lipoma.