The Journal of Emergency Medicine, Vol. ■, No. ■, pp. 1–2, 2017
© 2017 Elsevier Inc. All rights reserved.
0736-4679/$ - see front matter

https://doi.org/10.1016/j.jemermed.2017.11.021

Visual Diagnosis in Emergency Medicine

ADULT FEMALE WITH FEVER AND GROIN PAIN

Yasuhiro Suyama, MD,*† Miki Tanaka, MD,‡ Yuriko Fujii, MD,§ Akane Toriyama, MD,|| and Satoshi Houjou, MD‡

*Division of Rheumatology, JR Tokyo General Hospital, Tokyo, Japan, †Immuno-Rheumatology Center, St. Luke's International Hospital, St. Luke's International University, Tokyo, Japan, ‡Department of Gynecology, JR Tokyo General Hospital, Tokyo, Japan, §Department of Radiology, The Jikei University School of Medicine, Tokyo, Japan, and ||Department of Pathology, Juntendo University Urayasu Hospital, Chiba, Japan

Reprint Address: Yasuhiro Suyama, MD, Division of Rheumatology, JR Tokyo General Hospital, 2-1-3 Yoyogi Shibuya-Ku, Tokyo 151-8528, Japan

CASE REPORT

A 47-year-old woman with known uterine myoma presented with a complaint of fever and groin pain radiating to the buttocks for 4 days. Her initial vital signs showed a blood pressure of 105/72 mm Hg, pulse rate of 72 beats/min, and oral temperature of 38.6°C (101.48°F). Physical examination revealed a firm, irregular pelvic mass, without tenderness. The pelvic examination result was unremarkable. Laboratory testing revealed a white blood cell count of 11,800 cells/mL, C-reactive protein level of 113 mg/L, and lactate dehydrogenase level of 1103 IU/L. Contrast-enhanced computed tomography (CT) of the pelvis showed an intramural fibroid with peripheral enhancement surrounding the central hypodense lesion and uterine lumen (Figure 1). The patient was treated with hysterectomy and bilateral salpingo-oophorectomy, in which the diagnosis of red degeneration of uterine leiomyoma was confirmed by the typical pathological feature of intramural fibroid (Figure 2).

DISCUSSION

Red degeneration of uterine leiomyoma is a subtype of uterine fibrinoid degeneration, including hyaline, cystic, myxoid, and red (1). It can present as an acute abdominal pain with low-grade fever, occurring in 8% of tumors complicating pregnancy and 3% of all uterine leiomyomas (2,3). The name is derived from its beefy red color due to the coagulative necrosis indicating the presence of abundant thrombosed vessels at the periphery of the lesion caused by simultaneous and abrupt shutting off of the drainage veins (4).

Although CT findings are often heterogeneous, and magnetic resonance imaging is the gold standard in evaluating uterine degeneration, contrast-enhanced CT

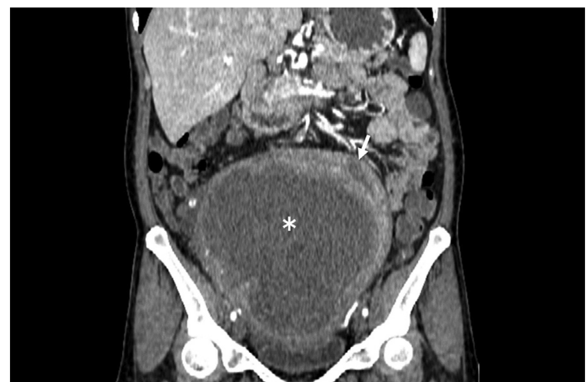

Figure 1. Contrast-enhanced computed tomography scan (coronal view) showing an intramural fibroid with peripheral enhancement surrounding the central hypodense lesion (asterisk) and uterine lumen (arrow).

This work was performed at the JR General Hospital.

RECEIVED: 6 August 2017; FINAL SUBMISSION RECEIVED: 28 October 2017;
ACCEPTED: 18 November 2017

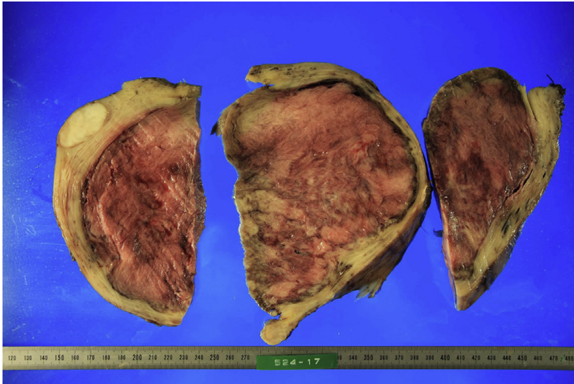

Figure 2. Gross-cut surface of the hysterectomy specimen showing a homogeneous beefy red color of hemorrhagic infarction throughout the lesion.

imaging can rule out urgent conditions related to fibroids, including torsion, prolapse of a submucous fibroid, ureteric obstruction, venous thromboembolism, or intestinal obstruction (1,5).

Our patient was treated with hysterectomy and bilateral salpingo-oophorectomy, in which the diagnosis was confirmed by the typical pathological feature of intramural fibroid (Figure 2).

REFERENCES

1. Ueda H, Togashi K, Konishi I, et al. Unusual appearances of uterine leiomyomas: MR imaging findings and their histopathologic backgrounds. Radiographics 1999;19(Spec No):S131–45.
2. Merrill JA, Creasman WT. Disorders of the uterine corpus. In: Scott JR, Disaia PJ, Hammond CB, Spellacy WN, eds. Danforth's obstetrics and gynecology. 6th edn. Philadelphia: Lippincott Williams & Wilkins; 1990:1055–65.
3. Persoud V, Arjoon PD. Uterine leiomyoma: incidence of degenerative change and a correlation of associated symptoms. Obstet Gynecol 1970;35:432–6.
4. Kawakami S, Togashi K, Konishi I, et al. Red degeneration of uterine leiomyoma: MR appearance. J Comput Assist Tomogr 1994;18:925–8.
5. Bennett GL, Slywotzky CM, Giovanniello G. Gynecologic causes of acute pelvic pain: spectrum of CT findings. Radiographics 2002;22:785–801.