

A Calcified Tumour in the Pelvis

A 74-year-old woman who had a history of heart failure presented with abdominal pain for one day. Physically, local tenderness was found at the right upper quadrant of her abdomen. Blood tests revealed a haemoglobin of 11.1 g/dL and a leukocyte count of 5,500/ μ L (neutrophil 76.2%, lymphocyte 18.9% and monocyte 4%). The liver profile showed an aspartate aminotransferase (AST) of 190 U/L, alanine aminotransferase (ALT) of 112 U/L, and total bilirubin of 0.6 mg/dL. Urinalysis showed neither haematuria nor pyuria. A diagnosis of acute cholecystitis was made based on the abdominal sonographic findings, including an impacted obstructing stone in the neck of the gallbladder, gallbladder wall thickening and a positive

sonographic Murphy's sign. She was hospitalised and received intravenous antibiotic administration. Incidentally, the routine abdominal radiography (Fig. 1) showed a calcified tumour in the pelvis. What is the diagnosis of the pelvic tumour?

- A. Foreign body
- B. Lithopedion
- C. Uterine leiomyoma
- D. Bladder stone
- E. Tetratoma

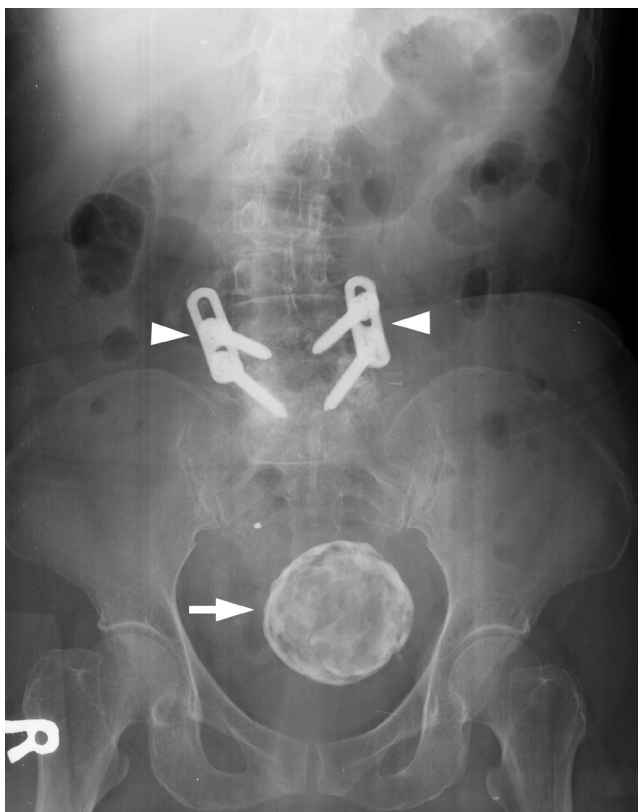


Fig. 1. The abdominal radiography showing screw fixation of the lumbar spine (arrowheads) and a calcified tumour in the pelvis (arrow).

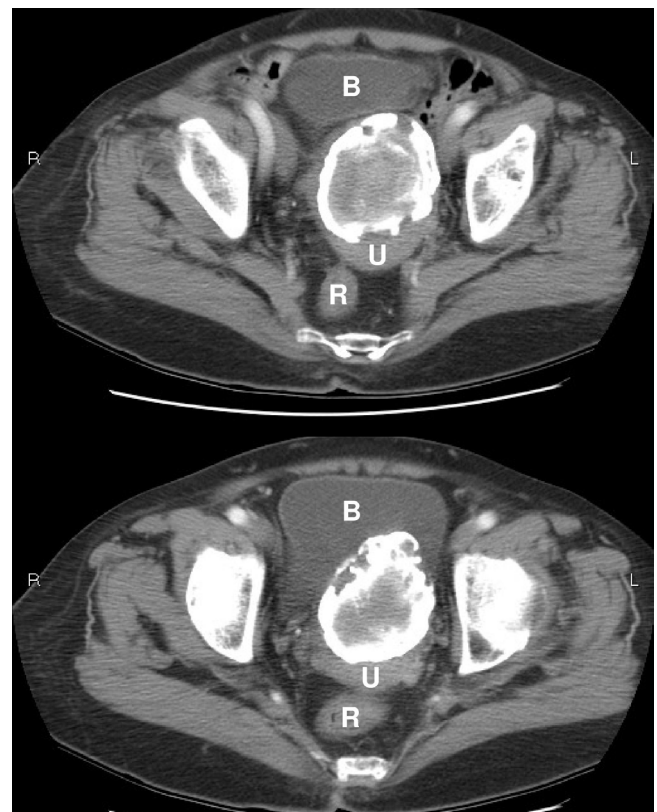


Fig. 2. The computed tomography of the pelvis showing a round uterine tumour with a well-defined and high-attenuation rim, and relatively little internal calcification. (B = bladder; U = uterus; R = rectum)

Answer: C

Discussion

Leiomyomas are the most frequent pelvic tumours in women.¹ Because of the discrepancy of its growth and blood supply, secondary changes are commonly seen in larger myomas, such as hyaline and cystic degeneration, myxomatous degeneration, calcification, infection and necrosis.^{1,2} Frequently, these tumours are commonly symptomless, and they are often found incidentally during image studies for other indications.² The diagnosis would be readily confirmed by a pelvic ultrasound study and a computed tomography (CT) scan is not always necessary. The management of asymptomatic myomas is observation and operative therapy may be considered in symptomatic patients who do not respond to conservative treatments.¹

In our case, for a more comprehensive evaluation of the upper abdomen, the surgeon recommended a CT scan, which showed a round uterine tumour with dense and well-defined calcifications (Fig. 2). It is pathognomonic of a calcified leiomyoma of the uterus.

The differential diagnosis of a calcified mass in the pelvis includes a bladder stone, a calcified neoplasm, a calcified aneurysm, dystrophic calcification of soft tissue, a lithopedion and a foreign body. Although the presence of calcifications in a uterine mass is reportedly uncommon, it is the most specific sign of a leiomyoma.^{2,3} Since uterine myomas are highly prevalent and characterised by protean imaging features,¹⁻³ it is important for clinicians to be familiar with leiomyomas having this unusual appearance.

REFERENCES

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Sheng Hsiang Lin,^{1,2} MD, Hsiao Li Lo,¹ RN

¹Department of Internal Medicine, New Taipei City Hospital

²Department of Respiratory Therapy, Fu-Jen Catholic University Medical College

Address for Correspondence: Dr. Sheng Hsiang Lin, Division of Pulmonary Medicine, Department of Internal Medicine, New Taipei City Hospital, No.2, Chung-Shan Rd., San-Chong Dist., New Taipei City 241, Taiwan (R.O.C). Email: linsh01@gmail.com