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Background

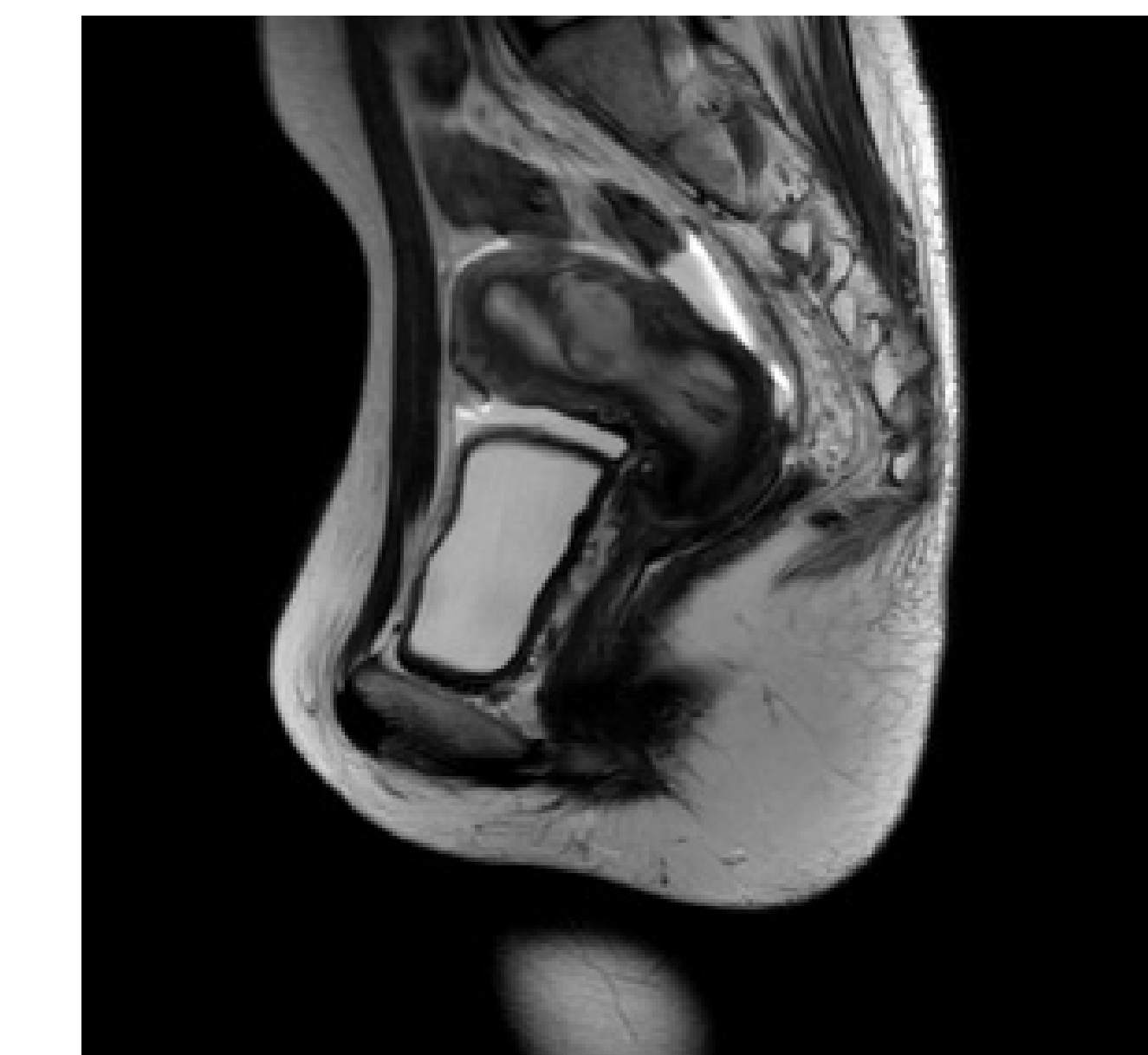
Uterine myxoid leiomyosarcoma (UMLMS) is an aggressive and extremely rare malignant mesenchymal tumor, with an annual incidence of 0.64/100 000 women. This article reported a young UMLMS patient who could not be diagnosed before surgery and was misdiagnosed during surgery.

Objectives

The aim of our case report is to improve our knowledge, diagnosis and treatment of UMLMS.

Case Presentation

A 29-year-old young female patient, G0P0, with no sexual life history, was admitted to the department of gynecology because of irregular vaginal bleeding. She has had type 1 diabetes for more than 1 year, The levels of tumour biomarkers were within the normal range. Transabdominal ultrasound and MRI showed uneven mass in uterine cavity, posterior wall and left lateral wall. The uterine mass removal and hymen repair were performed, respectively.



- The HE staining images of uterine tumor histopathology showed spindle cell hyperplasia, interstitial mucoid transformation, rich in small blood vessels, and easy to see mitotic images, with up to 3-4/HPF in some areas.
- The immunohistochemical results showed: Caldesmon (small region+), CD10 (focal region+), CD34 (-), Desmin (weak+), ER (scattered+), PR (+), HMB45 (-), Ki-67 (hot spot region 20%), S-100 (-), SMA(lamellar+), STAT6 (-), Vimentin (+). This case was finally diagnosed as UMLMS, it was recommended to perform a second operation and complete hysterectomy. However, because this patient had not given birth, she strongly requested to preserve the uterus and preserve fertility, At present, she is under close observation and follow-up.

Conclusion

UMLMS is an aggressive and extremely rare malignant mesenchymal tumor with a poor prognosis. The clinical symptoms and imaging findings are lack of specificity, and the diagnosis is mainly based on histopathological features. A multidisciplinary approach is essential for early identification and diagnosis of UMLMS, as well as improving patient outcomes.

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