

The use and benefit of fetal magnetic resonance imaging in the evaluation of uterine fibroids during pregnancy

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Objectives

To evidence the benefits of the use of fetal magnetic resonance imaging in gestations evolving with uterine fibroids

Methods

A total of 5 fetal MRIs were performed between 2021 and 2024, for diagnosis of giant uterine fibroids of variable location and size, in 1.5 T resonator with T2 fast slice techniques. All the referred cases were evaluated by the maternal-fetal medicine team by means of abdominal and transvaginal ultrasound.

Results

In each of the cases evaluated, the MRI allowed us to delimit areas of maternal or fetal involvement depending on their location.

Case 1: Intramural fibroid that decreased placental implantation territory.

Case 2 and 3: Multiple intramural fibroids in the uterine body and fundus of 11 and 13 cms respectively (case 2) and 7.4 cms in case 3, which increased maternal dyspnea.

Case 4: Intramural fibroid of 7 × 5.9 cm with anterior placenta implanted on the surface of the same, preventing the approach of the uterine segment.

Case 5: Subserosal fibroid in posterior uterine face of 8.8 x 7.7 cm compressing the maternal sacral area.

Conclusions

The use of fetal MRI in pregnancies with uterine fibroids, allows to evaluate the area of maternal involvement, aside from providing visualization of the extent of placental implantation on myomas, and facilitating a guide for the surgical approach in cases of planning segmental cesarean section, when the uterine segment is compromised.



Figure 1. Case 1: Fibroid within the uterine wall that limited placental implantation site

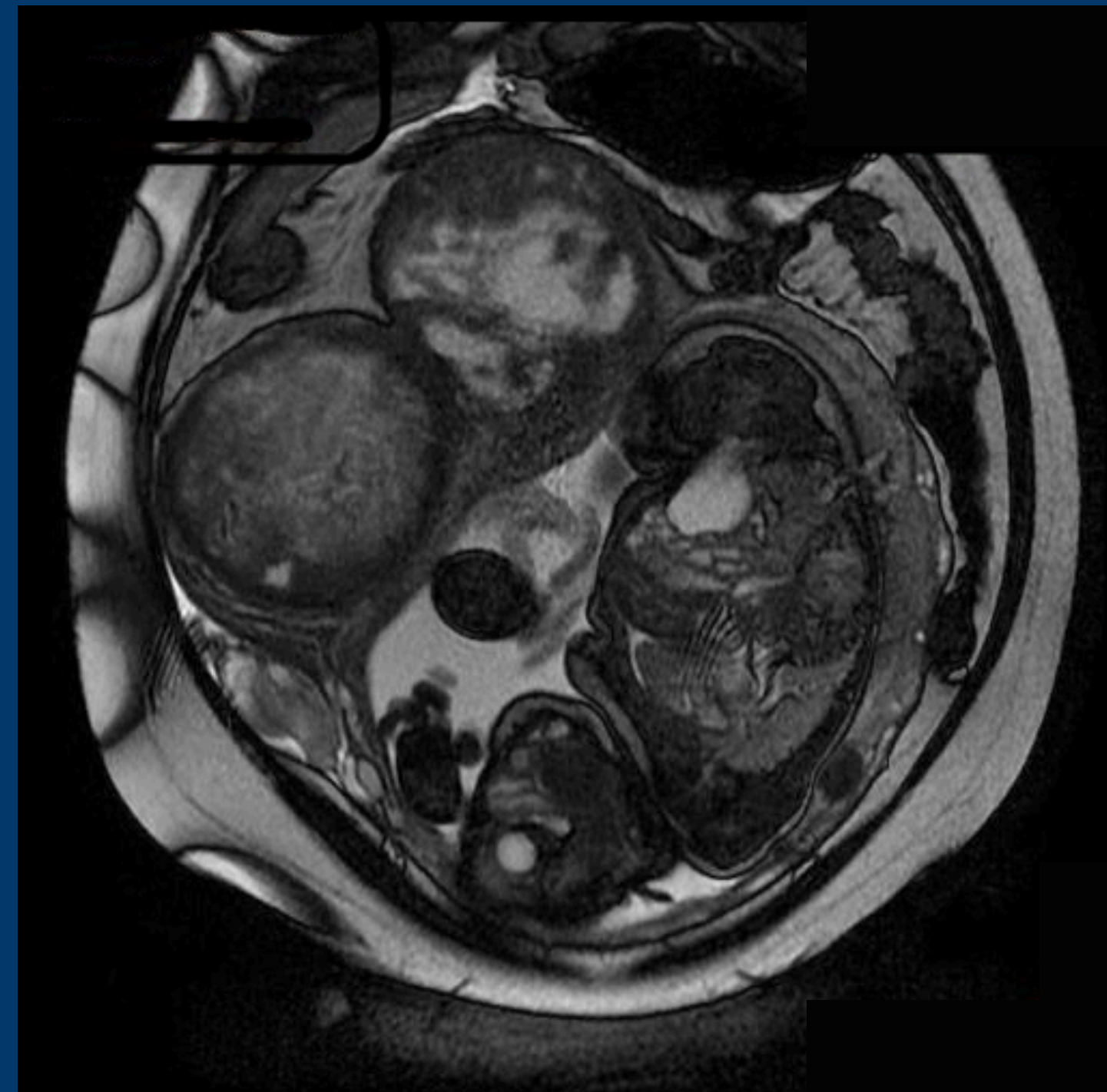


Figure 2. Case 2: Multiple intramural fibroids



Figure 3. Case 3: Myomatosis in the Uterine Fundus



Figure 4. Case 4: Uterine wall fibroid of 7 x 5.9 cm with overlying anterior placental implantation, obstructing the approach to the lower uterine segment.



Figure 5. Case 5: Large subserosal leiomyoma in the posterior uterine aspect compressing the sacral region