Further reflections after the second surgery step in a case of uterine malformation diagnosed in the shock room

To the Editor,

Recently we published a paper in the Journal of Ultrasound, titled "A uterine malformation diagnosed in the shock room: a case report which helps to identify how to avoid a potentially preventable life-threatening event" (1), describing a uterine rupture at 15.6 gestational weeks, due to a unicornuated uterus with a communicant residual right horn not diagnosed before pregnancy. This case highlighted the importance of the ability to diagnose uterine malformations at the first gynaecological evaluation, using a combination of abdominal-vaginal 2D-ultrasound, (2) as early detection is essential in reducing the risk of life-threatening events in case of pregnancy.

We want to share the subsequent management of this patient in order to demonstrate how correct management before pregnancy allowed for a reduction in surgical complications. This is good for the patient but challenging for the surgeons.

A year later this patient underwent surgery because she wanted further pregnancies. In this case in unicornuate uterus, the uterine horn should be removed to reduce its association with worsening obstetric outcomes (3,4). The initial approach was laparoscopic. Unfortunately, the patient had several abdominal adhesions and an intestinal injury was caused during the attempt to access. After a subsequent conversion to laparotomy, the rudimental horn was removed and an ileal resection was required for surgical complications, although her postoperative course was uneventful with discharge on the fifth day.

This uterine rupture was an emergency, and the surgeons were faced with an unexpected uterine malformation in an unstable patient. However, we believe that the possibility to remove the uterine horn during any emergency laparotomy for uterine rupture, should always be considered after patient stabilization.

To allow adequate correction the surgeons should be trained to distinguish a unicornuate uterus, in which the removal of the horn could be suggested, from a bicornuate uterus, in which the approach should be conservative. Moreover, although a second surgery would potentially reduce the risk of misdiagnosis, performing a single procedure has several advantages. In particular, it abolishes the waiting time for a second pregnancy, and also reduces the risk of organ injury due to abdominal adhesions.

Furthermore, if a second surgery is required, we recommend a left sub-costal Palmer's access and/or an access under optical guidance in order to reduce the risk of organ injury.

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