

PLACENTA ACCRETA, ABOUT A CASE

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ABSTRACT

Placenta accreta is an adhesion abnormality of the placenta responsible for abnormal myometrial invasion by tissue and trophoblastic tissue. Depending on the degree of myometrium involvement, we can distinguish placenta accreta (<50% myometrium), placenta increta (> 50% myometrium) and placenta percreta (affected beyond the serosa and neighboring organs).

The pathophysiological mechanism remains unknown, processes involving increased secretion of placental invading factors by the cytotrophoblast, excessive vascular remodeling or a combination of the two appear to be partly to blame.

The main risk factors are dominated by the history of cesarean section and uterine surgery. Endo-uterine procedures such as haemostatic curettage, hysteroscopy as well as a history of endometritis are increasingly correlated with the occurrence of placenta accreta.

Conventional 2D ultrasound is the gold standard for screening for placenta accreta. Magnetic resonance imaging does not have better diagnostic sensitivity than ultrasound, but it remains more effective in determining the degree of myometrial invasion, particularly in cases of posterior placenta and suspicion of a percreta placenta.

The definitive diagnosis is pathological.

The numerous mainly hemorrhagic complications observed during the placenta accreta, that may affect the vital prognosis of the mother and the fetus, require early detection and strict and regular pregnancy monitoring as well as multidisciplinary care.

The principle of treatment is based either on radical treatment by hysterectomy, conservative treatment can be discussed in certain cases, in particular to preserve fertility. embolization of the uterine arteries is proposed especially in case of conservative treatment.

We report the case of a placenta accreta in a parturient admitted to the emergency department of the souissi rabat maternity unit. The aim of our study is to shed light on the main risk factors and pathophysiological mechanisms that can induce a placenta accreta as well as the different diagnostic and therapeutic modalities.

KEYWORDS: placenta accreta, scarred uterus, endo uterine gestures, hysterectomy.

INTRODUCTION

Placenta accreta corresponds to a decidualization anomaly resulting in an absence of decidua responsible for abnormal myometrial invasion by tissue and trophoblastic tissue. Depending on the degree of myometrial involvement, a distinction is made between placenta accreta (<50% myometrium), placenta increta (> 50% myometrium) and placenta percreta (involvement beyond the serosa and neighboring organs).^[1]

The etiopathogenesis of placenta accreta remains unknown, the processes involving increased secretion of placental invasion factors by the cytotrophoblast,^[2] excessive vascular remodeling or a combination of the two may be partly implicated.^[3]

The main risk factors are: history of cesarean sections, uterine surgery and endo-uterine procedures, maternal age over 35 years, placenta previa^{[4][5][6][7]} and should be systematically checked for during clinical screening.

An increase in the incidence of placenta accreta is reported from 0.04% to 0.9% mainly related to the increase in the rate of uterine surgery^{[8][9]}

Pelvic ultrasound is the standard examination for the detection of a placenta accrete,^[10] the suggestive signs are the presence of an intraplacental gap, a fine myometrium, and the disappearance of the echogenic thin border between the placenta and the myometrium.^[11]

Magnetic reasoning imaging does not have better diagnostic sensitivity than ultrasound,^[12] but it remains more effective in determining the degree of myometrial invasion, particularly in the case of placenta percreta.

The definitive diagnosis is pathological.

The numerous mainly hemorrhagic complications observed during the placenta accreta, and which can engage the vital prognosis of the mother and the fetus, require early screening and strict and regular pregnancy monitoring as well as multidisciplinary management. placenta accreta in a parturient admitted to the emergency department of the souissi rabat maternity hospital. The aim of our study is to shed light on the main risk factors and pathophysiological mechanisms that can induce a placenta accreta as well as the different diagnostic and therapeutic modalities.

Case report

We report the case of a 32-year-old patient, fourth gesture second par, a first pregnancy carried to term with an upper delivery for acute fetal distress at the start of labor, two antecedents of spontaneous abortions supplemented by hemostatic curtages on retention. placental in post abortion, moreover the patient reported the notion of recurrent genital infections having

benefited from outpatient treatment apart from a single episode which was managed in a hospital environment.

The patient was admitted to the emergency room of the Souissi Rabat maternity unit for third trimester metrorrhagia on a scarred uterus at the start of labor, with a pregnancy not followed at 37 weeks of amenorrhea.

The admission examination found a conscious eupneic patient who was afebrile, normotensive normocardium, clinically the patient presented with low abundance of bleeding.

An obstetric ultrasound performed from the start made it possible to objectify an evolving monofetal pregnancy, a fetal biometry concordant with the term of the pregnancy, an amniotic fluid in normal quantity, a grade 3 placenta previa, with ultrasound signs suggesting a placenta accreta, figure^[1] and figure^[2]; Multiple irregular intraplacental gaps with turbulent flow with color and energy doppler, disappearance of the thin border between the myometrium and the placenta, no interruption of the intervesico-uterine border.

The patient was taken directly to the operating room; a caesarean section was performed allowing the removal of a newborn male child of 10 out of 10. on exploration, a non-detachable placenta was found with apparent sign of a focus of accretion at the segmental level, with no bladder invasion in the figures^[3] and^[4]

The patient presented with uterine inertia with lightning bleeding, necessitating a hemostatic hysterectomy immediately. No postoperative complications were deployed, the patient was declared out on day 7 postpartum

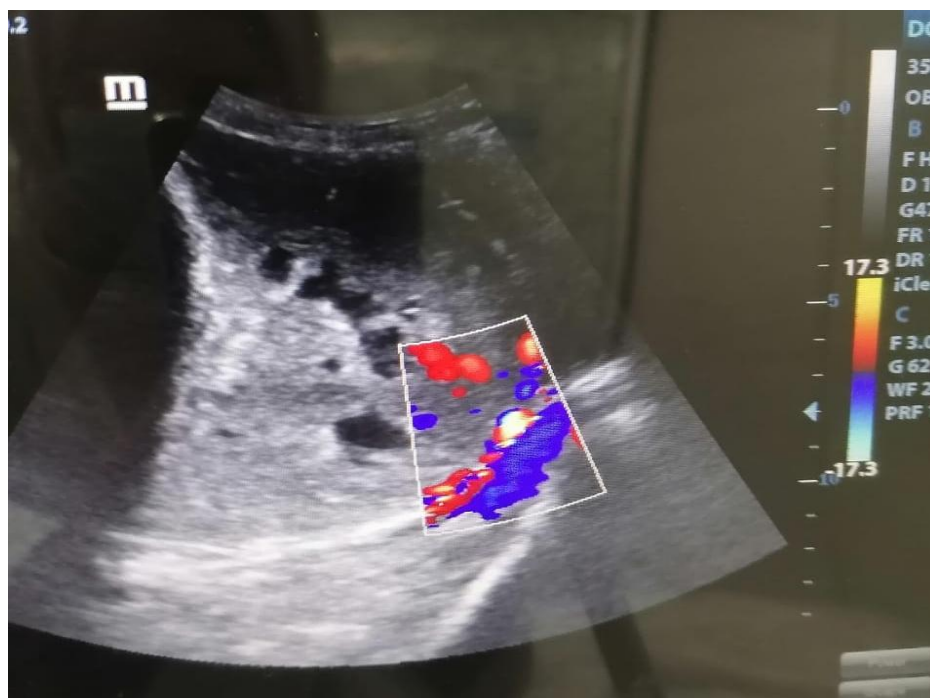


Figure 1: Gap images with turbulent Doppler flow.

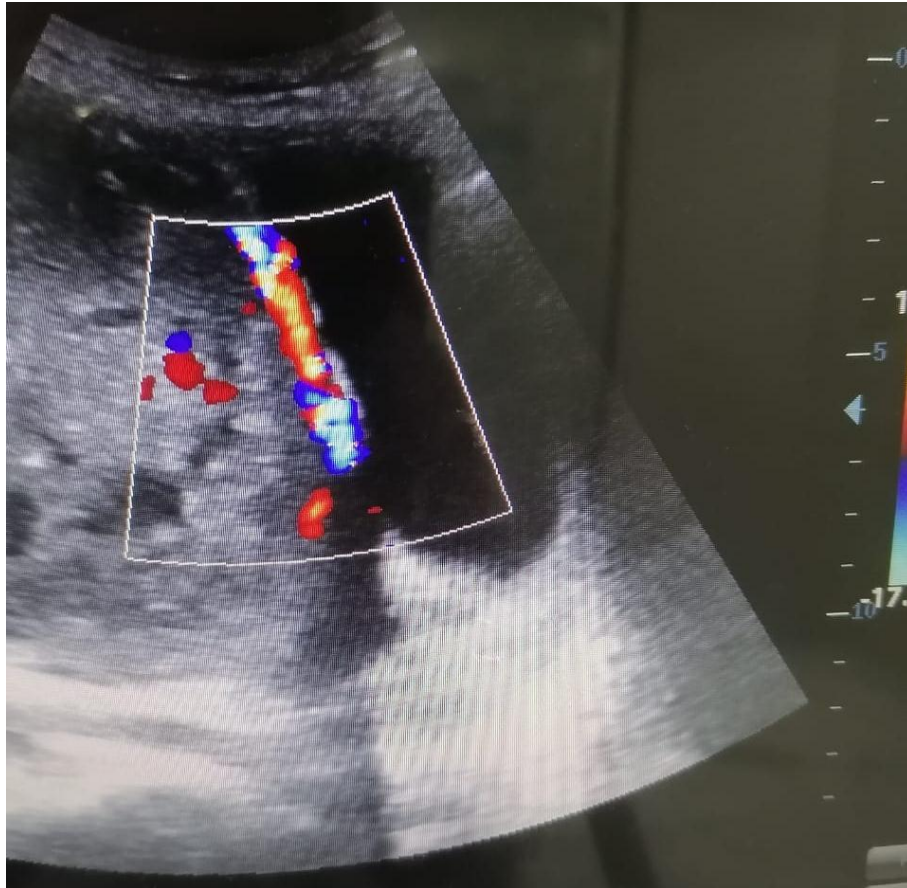


Figure 2: Gap images with turbulent Doppler flow.

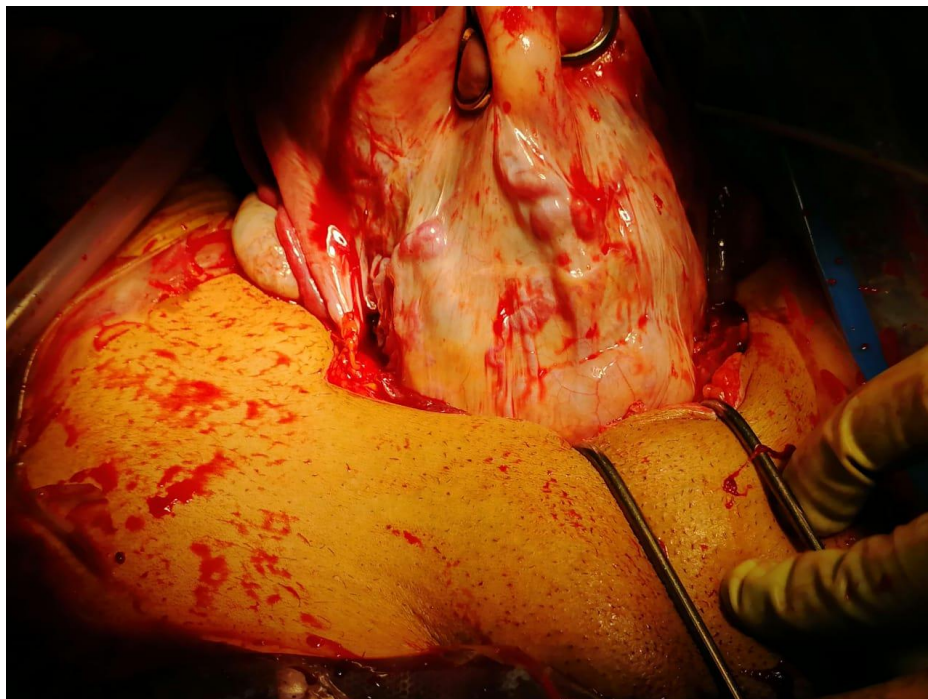


Figure 3 : images of accretization foci at the segmental level.

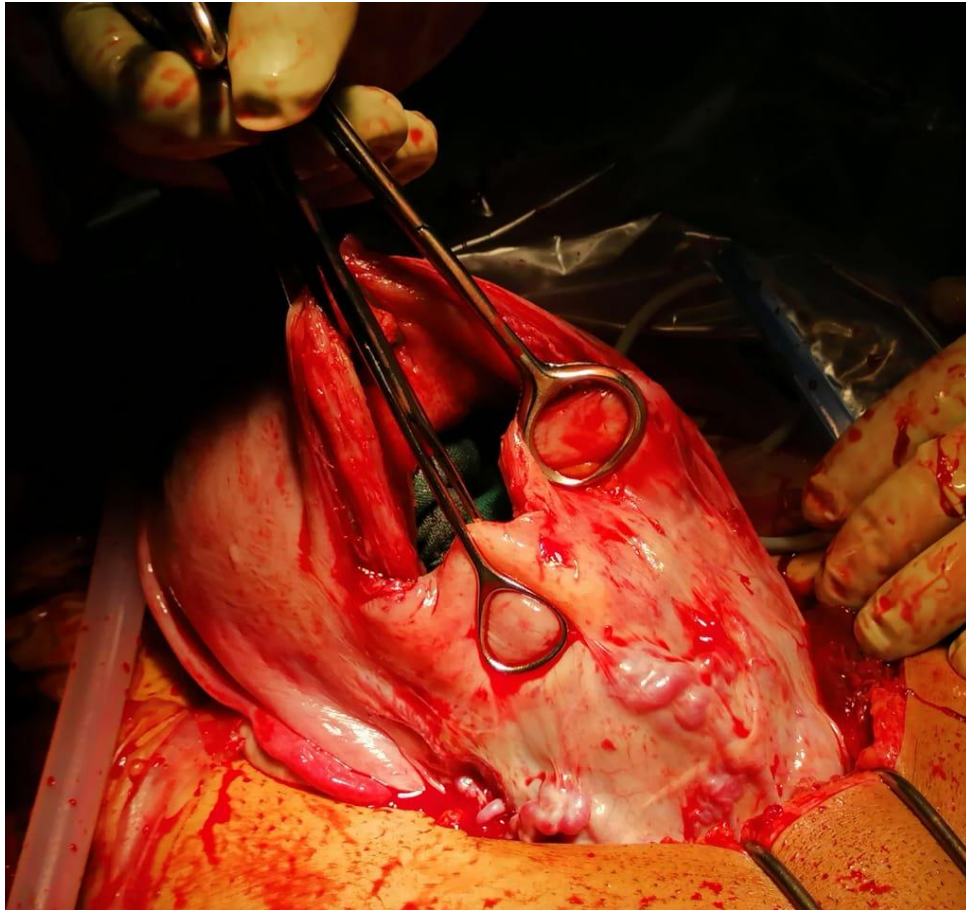


Figure 4 : images of accretization foci at the segmental level.

DISCUSSION

Placenta accreta (PA) is an abnormal invasion of the placenta from trophoblastic tissue through the decidua basalis into the underlying uterine myometrium, uterine serosa or even beyond, extending to the pelvic organs.

The incidence of AP has increased worldwide, mainly due to increased rates of caesarean sections, from 1 in 2,500 to 1 in 500 pregnancies;^[13] in fact, during the healing process, unlike the endometrium which undergoes regeneration and recolonization, muscle fiber repair is carried out by stromal tissue, in particular collagen and elastin,^[14] in addition, a weak vascularization has been observed in the scar area with increased resistance in the uterine arteries,^[15] resulting in less elastic tissue more prone to dehiscence rupture with a high risk of accretion.

Endometrial invasive procedures also appear to increase the risk of placenta accreta. In the retrospective study by Warshak *et al.*, Out of 99 consecutive cases of placentas accreta, 15% of patients had no history of cesarean section, including 6% who had only endo-uterine curettage as a history.^[16] The association of the notion of a scarred uterus and the two antecedents of curetted abortions is therefore closely linked to the occurrence of the placenta accreta in our patient. Otherwise, recurrent genital infections and in particular endometritis lead to

fibrosis and endometrial tissue remodeling, which may lead to decidualization anomaly.^[17]

Conventional two-dimensional ultrasound is currently the best screening tool to detect placenta accreta with sensitivity 77-90.7%, specificity 96-98%, positive predictive value 65-93%, and negative predictive value by 98%.^[18] Magnetic resonance imaging (MRI) is another diagnostic tool for detecting abnormal placentation. MRI has a sensitivity of 80 to 85% and a specificity of 65 to 100%.^[19] MRI can be used in conjunction with conventional ultrasound and may be useful in some cases, particularly if the placenta is located on the posterior uterine wall.^[20]

The management of placenta accreta is multidisciplinary. There are two components therapeutic, the first is the radical treatment consisting in performing a hysterectomy after fetal excision, the second is the conservative treatment especially in particular to preserve fertility; the latter requiring strict monitoring due to the risk of secondary bleeding and the risk of infection.^[1]

The use of methotrexate in case of conservative treatment has been described,^[21] embolization of the uterine arteries ^[22] is sometimes systematically associated with radical treatment.^[23] It can also be performed in combination with conservative treatment

systematically or in case of bleeding . The benefit of systematic arterial embolization in placenta accreta has not been demonstrated but its effectiveness has been proven in postpartum hemorrhage, with or without placenta accreta. Complications of embolization are rare,

CONCLUSION

Due to the high risk of maternal and fetal mortality and morbidity linked mainly to the hemorrhagic complication the management of the placenta accreta must be multidisciplinary and must be carried out in a precise manner by screening

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Guarantor of Submission

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Competing interests

The authors declare that they have no competing interests.

Consent for publication

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Ethics approval and consent to participate

Ethics approval has been obtained to proceed with the current study. Written informed consent was obtained from the patient for participation in this publication.

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Group 2 - Critical revision of the article

Group 3 - Final approval of the version to be published

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