Journal of african clinical cases and reviews / Journal africain des cas cliniques et revues

www.jaccrafrica.com ISSN 1859-5138 Open access

Clinical case

Severe anaemia revealing uterine rupture late in postpartum: case report

Une anémie sévère révélant une rupture utérine tardive en post-partum : rapport de cas

D Toumi*[1], M Amina[1], R Issa[1], A Grassi[1], I Miledi[1], E Guerbej[1], I Zouari[1], G Imen[1], Z Olfa[1], F Raja[1]

Résumé

La rupture utérine est l'une des complications obstétricales les plus redoutées.

La rupture utérine est une complication rare du travail qui met en jeu le pronostic vital de la mère et du fœtus ainsi que l'avenir obstétrical de la femme.

Elle est plus fréquente en cas d'utérus cicatriciel et très rare en cas d'utérus sain.

Nous rapportons le cas d'une femme de 35 ans avec 4 accouchements par voie basse.

Son dernier accouchement a eu lieu dans un hôpital périphérique, avec un bébé de 3650 grammes, sans notion d'expression utérine ni d'extraction instrumentale.

Le dernier accouchement a eu lieu 10 jours après son admission dans notre maternité.

La patiente a été adressée à notre maternité pour une asthénie, des vertiges et une fièvre qui sont progressivement aggravés depuis l'accouchement jusqu'à devenir invalidants, limitant l'activité quotidienne de la patiente.

A l'admission, la patiente était tachycarde à 110 battements/min, fébrile à 39°, conjonctive pâle.

Le diagnostic de rupture utérine colmatée par un hématome a été posé après un scanner abdomino pelvien.

Le traitement a été chirurgical avec une hystérectomie.

En conclusion, la rupture utérine reste l'une des complications obstétricales les plus graves. Elle nécessite un diagnostic et une prise en charge adéquate et rapide.

Mots-clés : Rupture utérine, grossesse, hématome, utérus sain, cas clinique.

Abstract

Uterine rupture is one of the most feared obstetric complications.

Uterine rupture is a rare complication of labour which puts at risk the vital prognosis of the mother and the fetus as well as the obstetrical future of the woman.

It is more frequent in the case of a scarred uterus and very rare in the case of a healthy uterus.

We report the case of 35-year-old female with a history of 4 vaginal deliveries.

Her last delivery was in a peripheral hospital, a 3650 grams baby, no notion of uterine expression nor an

instrumental extraction.
The last delivery was 10 days after her admission to our maternity.
The patient was referred to our maternity hospital for asthenia, dizziness and a fever that had progressively worsened since her delivery until it became disabling, limiting the patient's daily activity.
On admission, the patient was tachycardic at 110 beats/min, febrile at 39°, conjunctiva pale.
The diagnosis of a uterine rupture blocked by a haematoma was made following an abdominal and pelvic scan.
The treatment was surgical with a hysterectomy.
To conclude, Uterine rupture remains one of the most serious obstetrical complications. It requires a diagnosis and early surgical management.
Uterine rupture in a non-scarring uterus is a serious and sometimes dramatic complication of pregnancy.
Keywords: Uterine rupture , pregnancy , hematoma , healthy uterus , case report.

Introduction

Uterine rupture is a rare complication of labour that is life-threatening for both the mother and the fetus, as well as for the woman's obstetrical outcome. It is more frequent in the case of a scarred uterus and very rare in the case of a healthy uterus. (1)
Uterine rupture is more found in multigravid women with cesarean deliveries (1%) compared to those with unscarred uteri (0.006%).(1)
A typical uterine rupture is manifested by abdominal pain and hemorrhagic shockand abnormal fetal heart rate.
Atypical uterine rupture make diagnosis more difficult. The treatment of uterine rupture depends on the extent of the rupture, age, parity.
The main goal is to make the patient hemodinamically stable, which is done by hysterectomy. (2)
Both mother and fetus are in danger, it is a catastrophe for both.
The incidence has increased in recent years as the cesarean section rate has increased, but multiparity and the inappropriate use of uterotonics are more common. This potentially disastrous event may have a vague initial presentation.(3)
Two types uterine rupture , complete rupture which results in a direct connection between the uterine cavity and the peritoneal space , and incomplete rupture where the uterus remains covered by a portion of visceral peritoneum .(4)

Clinical case

35-year-old female patient, blood type Rhesus A negative 6th gesture, 4th pare, with a history of 4 vaginal deliveries.
2 male and 2 female children, 4 live children, 2 early abortions, one uncured, the other haemorrhagic and cured.
Her last delivery was in a peripheral hospital, a 3650 gram eutrophic baby, no notion of uterine expression nor an instrumental extraction .
The last delivery was 10 days after her admission to our maternity hospital.
The patient was referred to our maternity hospital for asthenia, dizziness and a fever that had progressively worsened since her delivery until it became disabling, limiting the patient's daily activity.
On admission, the patient was normotensive 110/70 mm hg, tachycardic at 110 beats/min, febrile at 39°, conjunctiva pale.
Obstetrical examination showed minimal black bleeding, fetid lochia, presence of pain on latero uterine mobilisation, no Douglas cry.
An ultrasound was done showing a heterogeneous hyper echogenic image latero uterine right of 6*5 centimeters, with an empty uterus thin blade of effusion in the cul de sac Douglas.
The biology showed an anaemia of 4 g/dl normo chrome normocytic.
After stabilization of her condition, an abdominal and pelvic CT scan with injection of contrast medium was performed showing a post-pregnant uterus with a hematoma in the process of liquefaction, with air

bubbles opposite a right cervical-isthmic parietal discontinuity 35 mm in diameter. an appearance in favour of a cervical-isthmic uterine rupture with a 70 mm haematoma. a small pelvic effusion with discrete densification of the pelvic fat (figure 1).

The patient was taken to the operating theatre for emergency laparotomy.

On exploration, the presence of a small haemoperitoneum was noted in the first instance, and in the second instance a right antero lateral cervical-isthmic uterine rupture of 40 millimetres with a haematoma of the broad ligament on the right (Figure 2). Given the patient's age and her lack of desire for a subsequent pregnancy, and the age of this rupture, the choice was made subtotal hysterectomy with conservation of the ovaries (figure 3).

The postoperative course was good, and the patient was discharged from our facility six days later.

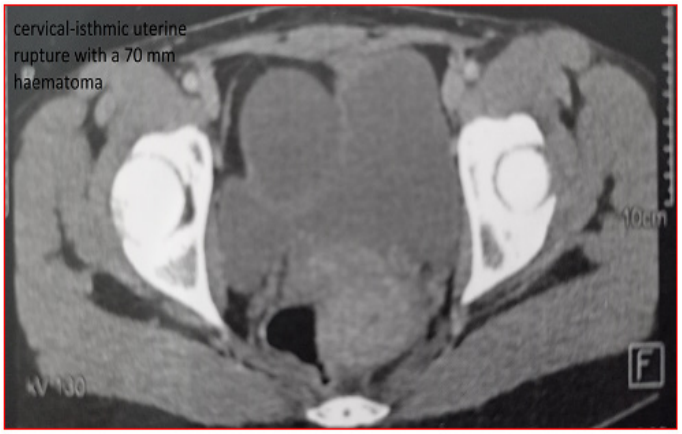

Figure 1: radiological image of uterine rupture

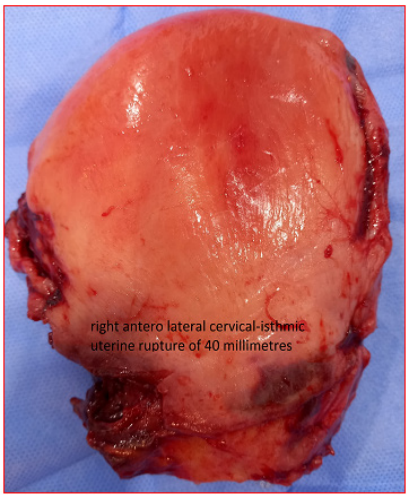

Figure 2: macroscopic image of uterine rupture

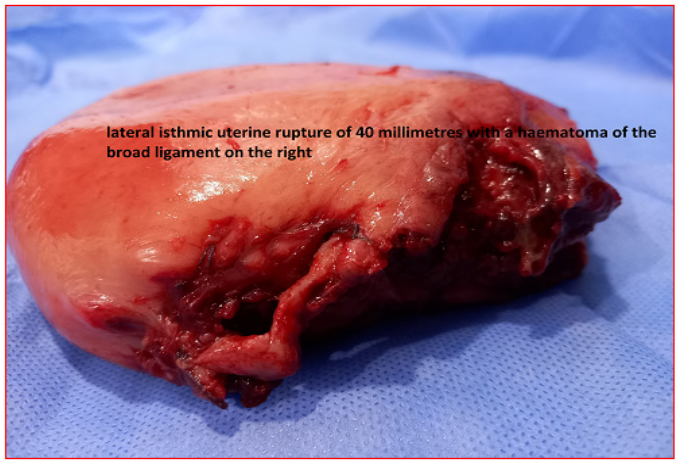

Figure 3: subtotal hysterectomy

Discussion

Uterine rupture resulting in dramatic maternal hemorrhage and the death of both mother and fetus. (5)

The disease occurs during late pregnancy and delivery period and scars resulting from prior uterine surgery (Cesarean section or myomectomy) remain the foremost risk factor for
uterine rupture.(5)

Uterine rupture in a non-scarring uterus is a very rare complication in developed countries but relatively more frequent in developing countries.

This disparity reflects differences in socio-economic conditions, high levels of poverty and lower levels of medical supervision.

A case series study by Revicky et al. reported that twelve cases of uterine rupture have occurred out of the total 36.000 deliveries in one of the UK hospitals within six years.(1)

In an international multicenter study by Vandenberghe et al the increase in the incidence of complete uterine rupture may be explained, among other things, by an increase in the
incidence of attempts of vaginal delivery after a previous caesarian section (Trial of Labor After Caesarean Section –TOLAC). (2)

According to the literature, most risk factors of uterine rupture are (high age, multiparity, history of curettage

or myomectomy, corporal caesarean section scar, Placental insertion anomalies, pelvic anomalies, fetal macrosomia, dystocic fetal presentations, induction of labour by misoprostol). (3)

The clinical presentation of uterine rupture is difficult. (2)

Many signs such as acute abdominal pain, vaginal bleeding, dizziness, loss of consciousness, hypotension and tachycardia. (2,7)

However, not all cases of uterine rupture present with these classical features; therefore, it is critical to keep a high index of suspicion when managing women who present with some or all of these symptoms and signs regardless of the parity or gestational age .(6)

The clinical presentation of uterine rupture is generally noisy and the typical signs are violent pelvic pain, a sensation of tearing, metrorrhagia, and instability of the haemodynamic state evolving towards shock But sometimes the clinical picture is misleading and not alarming.(6)

There are two types of uterine rupture: complete or incomplete rupture. incomplete uterine rupture, perimetrium remains intact, but complete rupture involves all three layers of the uterine wall, including the perimetrium.(2)

Incomplete uterine rupture is most frequently caused by uterine scar dehiscence from a previous caesarean section and/or another uterine procedure . (2)

Uterine rupture can be primary or secondary.

Primary uterine rupture is uterine rupture in an unscarred uterus , whereas secondary uterine rupture is the rupture of the scarred uterus.(2)

For the site of uterine rupture, the most publications are in agreement with the work of Margulies and Voogd when the rupture appears during labour it often involves the lower segment whereas it is corporal before labour. (8)

The rupture will then extend upwards (corporal segment), or to the sides (damage to the uterine artery and haematoma of the broad ligament), or downwards (giving cervical lesions).(7)

In our case, the uterine rupture is lateral cervical-isthmic, involving the lower segment and the uterine body not extended towards the cervix.

Clinically, our patient did not present a delivery haemorrhage after delivery and no signs during labour, but she consulted us after ten days of delivery for asthenia and dizziness that progressively worsened until they became disabling without metrorrhagia.

Timely diagnosis and adequate resuscitation are of great significance in the management of uterine rupture .(2)

The therapeutic management of uterine rupture remains a medical-surgical emergency and includes medical resuscitation followed by emergency laparotomy.

Surgical treatment of uterine rupture in a healthy uterus should ideally be conservative ideally in young women wishing to become pregnant.

where conservative treatment appears impossible due to the extent of the lesions, hysterectomy is required .(7)

the choice of the surgical intervention comes down to many options: total hysterectomy,

subtotal hysterectomy, suturing of the rupture, or suturing of the rupture combined with bilateral tubal ligation.

The main goal of the intervention is to stop bleeding, resuscitate the patient, and make her hemodynamically stable as quickly.

The most common reasons for hysterectomy are extensive uterine rupture and profuse bleeding.(2)

In our case, subtotal hysterectomy was done on the basis of the extensive uterine rupture.

Uterine rupture is one of the major causes of haemorrhage in the third trimester of pregnancy, per partum and post partum.

It is one of the traumatic causes of post partum haemorrhage.

This haemorrhage is all the more serious when the uterine vessels located laterally are affected.

Anaemia was the commonest morbidity found in about 38% of the patients, this has been reported in several studies .(8)

The causes of death were hypovolaemic shock. The

improved survival can be attributed to efficient blood transfusion. (8)

Conclusion

Uterine rupture remains one of the most dramatic obstetric complications.
It requires diagnosis and early surgical management.
This pathology is still responsible for the very high rate of maternal and neonatal mortality and morbidity in our country.
Uterine rupture in a non-scarring uterus is a catastrophic complication of pregnancy.
It is an obstetrico-surgical emergency whose rapid diagnosis and surgical treatment has improved the maternal prognosis.
Its prognosis is poor because of the high rate of mortality and morbidity, which exceeds that of ruptures in scar uterus.
Its clinical picture is misleading, no clinical sign is pathognomonic, its management is a vital emergency that requires the mobilization of a multidisciplinary team (gynecologists, resuscitators, neonatologists, midwives, nurses, anesthetists, instrumentalists, biologists).

Letter of motivation

I think that our clinical case should be published because uterine rupture in a healthy non-scarring uterus with a late diagnosis is a rare case with a difficult clinical and radiological diagnosis that should not be ignored in order to start the best possible therapeutic management to improve the vital and functional prognosis of the woman.

***Correspondence**

Dhekra Toumi

dhekratoumi1982@yahoo.fr

Available online: October 31, 2023

1 : Service of Gynecology and Obstetrics, Maternity and Neonatology centre of Monastir

Conflict of interest : None

References

[1] Hamed Elbaih A, Jihwaprani M, Mousa A, Abdul Halim Y, ElKouz Y. Posterior Uterine Wall Rupture in a Multiparous Female Presenting Post-Cesarean Deliveries: A Case Report. Int J Surg Med. 1 janv 2023;1.

[2] Cerović-Popović R, Sparić R. Spontaneous uterine rupture during pregnancy. Srp Med Cas Lek Komore. 2023;4(2):133-42.

[3] Agarwal M, Singh S, Sinha S. A Rare and Unique Case Report of Lateral Uterine Wall Rupture and Its Review. Cureus [Internet]. 8 mai 2023 [cité 27 juill 2023]; Disponible sur: https://www.cureus.com/articles/154692-a-rare-and-unique-case-report-of-lateral-uterine-wall-rupture-and-its-review

[4] Abdulmane MM, Sheikhali OM, Alhowaidi RM, Qazi A, Ghazi K. Diagnosis and Management of Uterine Rupture in the Third Trimester of Pregnancy: A Case Series and Literature Review. Cureus [Internet]. 2 juin 2023 [cité 27 juill 2023]; Disponible sur: https://www.cureus.com/articles/137103-diagnosis-and-management-of-uterine-rupture-in-the-third-trimester-of-pregnancy-a-case-series-and-literature-review

[5] Chen Y, Cao Y, She JY, Chen S, Wang PJ, Zeng Z, et al. Spontaneous rupture of an unscarred uterus during pregnancy: A rare but life-threatening emergency: Case series. Medicine (Baltimore). 16 juin 2023;102(24):e33977.

[6] Saleem HA, Edweidar Y, Salim MA, Mahfouz IA. Mid-trimester spontaneous rupture of a bicornuate uterus: A case report. Case Rep

Womens Health. sept 2023;39:e00524.

[7] Chourouk E, Safaa A, Amina L, Najia Z, Aziz B. Rupture utérine spontanée sur utérus sain: a propos d´un cas et revue de la littérature. PAMJ Clin Med [Internet]. 2020 [cité 2 août 2023];3. Disponible sur: https://www.clinical-medicine.panafrican-med-journal.com/content/article/3/8/full

[8] Mohammed LA, Olajide OL, Abubakar RF, David NE, Buba KZ. Uterine Rupture at Federal Teaching Hospital, Katsina: A Five Year Review. Int J Res Oncol [Internet]. 31 mars 2023 [cité 27 juill 2023];2(1). Disponible sur: https://www.scivisionpub.com/pdfs/uterine-rupture-at-federal-teaching-hospital-katsina-a-five-year-review-2739.pdf

To cite this article :

D Toumi, M Amina, R Issa, A Grassi, I Miledi, E Guerbej et al. Severe anaemia revealing uterine rupture late in postpartum: case report. Jaccr Africa 2023; 7(4): 47-52