

Complicated acute appendicitis on pregnancy : about 2 cases

**Abdou Niassa¹, Papa Mamadou Faye², Mohamadou Lamine Gueye³, Abdou Aziz diouf⁴,
Moussa Diallo⁵, Abdurrahman Ndong⁶, Ousmane Thiam⁷, Ngoné Diaba Diack Abdoulaye
Leye⁸, Mamadou Cisse⁹, Alassane Diouf¹⁰, Madieng dieng¹¹**

1 General surgeon, Surgical département, Pikine Hospital (Dakar-Senegal)

2 General surgeon, general surgical department, Aristide Le Dante hospital (Dakar-Senegal)

3 General surgeon, general Surgical département, Aristide Le Dante hospital (Dakar-Sénégal)

4 Obstetrician gynecologist, obstetric gynecological department, Pikine Hospital (Dakar-Senegal)

5 Obstetrician gynecologist, obstetric gynecological department, Pikine Hospital (Dakar-Senegal)

6 General surgeon, general surgical department, Saint-Louis hospital (Saint-Louis-Senegal)

7 General surgeon, general surgical department, Dalla Jamm hospital (Dakar-Senegal)

8 Internist, internal medical department, Pinkie hospital CHN de Pikine (Dakar-Sénégal)

9 General surgeon, general surgical department, Dalla Jamm hospital (Dakar-Senegal)

10 Obstetrician gynecologist, obstetric gynecological department, Pikine Hospital (Dakar-Senegal)

11 General surgeon, general surgical department, Aristide Le Dante hospital (Dakar-Senegal)

***Corresponding Author:** Abdou Niassa, General surgeon, Surgical département, Pikine Hospital (Dakar-Senegal).
email: niasseabdou30@gmail.com

Abstract

Apart from obstetric emergencies, the abdominal emergencies of the pregnant woman whether digestive, gynecological, urological, vascular or traumatic, can complicate a pregnancy in 500 to 700, with the need for surgical intervention in 0.2 to 2 % of cases. Relatively rare, these emergencies require rigorous and multidisciplinary care. Their diagnosis is not easy and radiological investigations are often limited by the risks of irradiation. The most common abdominal emergencies are acute appendicitis and its complications and acute cholecystitis. We reported the observations of two patients with an active pregnancy who were received for complicated acute appendicitis. The aim of our study was to relate the therapeutic and evolutionary diagnostic aspects.

Conclusion

Abdominal pain is a common cause of consultation during pregnancy. Apart from obstetric emergencies, digestive emergencies must be mentioned and sought out and their management is multidisciplinary.

Keywords: Appendicitis; Appendectomy; Pregnancy; Obstetric Ultrasound.

INTRODUCTION

Abdominopelvic pain during pregnancy is a frequent reason for emergency consultation. We must of course think of the obstetric causes that justify specific emergency care [1]. But

these pains can also be of digestive, gynecological, or traumatic origin. A medico-surgical emergency of non-obstetric cause complicates approximately one pregnancy in 500 to 700 [2,3]. These different pathologies require surgical intervention in 0.2 to 2% of cases with acute appendicitis and acute cholecystitis in the first row [4-6]. The aim of our study was to relate the specific

aspects in diagnosis, treatment and impact on pregnancy of these digestive emergencies. We reported the observations of two patients carrying an active pregnancy and received for complicated acute appendicitis.

Observation 1

It was a 34-year-old primigravid patient. She was carrying an evolving oncofetal pregnancy of 10 weeks. She was received for pain from the right iliac fossa evolving for 10 days before her admission associated with vomiting and micturition burns in a febrile context. The temperature was 38.4°C. The physical examination found a sensitive abdomen as a whole with defense and scream of the navel. The cervix was long and closed. Biology found hyperleukocytosis at 20,790 elements / mm³ and an inflammatory anemia at 10.2 g / dl. The abdominal and obstetric ultrasound found a progressive monofuel pregnancy of 10 SA associated with an enlarged appendage with a peritoneal effusion of medium abundance. Under perioperative tocolysis with Salbutamol, a median laparotomy above and under the umbilical found 500 ml of foul-smelling pus franc in the right iliac fossa, in the Douglas cul-de-sac, in the parieto-colic gutters and in inter-handles. The ileo-caeca appendage was gangrenous, the pregnant uterus and the left ovary had a yellow body. An appendectomy associated with a peritoneal toilet and drainage were performed. The suites were simple. The discharge was performed on the 8th post-operative day. The pregnancy progressed well and the delivery took place at 37 weeks by vaginal delivery.

Observation 2

It was a 30 year old patient, 3rd gesture, 2nd guard. She was the carrier of an evolving oncofetal pregnancy of 9 weeks. She was received for pain from the right iliac fossa evolving for 8 days before admission, associated with vomiting in a febrile context. The temperature was 37°C. The physical examination found a painful defensiveness and empathy in the right iliac fossa. The cervix was short and closed. Biology found hyperleukocytosis at 15,500 elements / mm³. The hemoglobin level was 13.2 g / dl. Abdominal and obstetric ultrasound revealed an active monofuel pregnancy of 9 weeks associated with an appendicular abscess. Under perioperative tocolysis with Salbutamol, an incision by Mac Burney found 150 ml of foul smelling pus in the right iliac fossa in a shell with a gangrenous retro-caeca appendage. An appendectomy associated with a toilet and drainage were performed. The suites were simple. The discharge was performed on the 5th postoperative day. The pregnancy progressed well and the delivery took place at 38 weeks by vaginal delivery.

DISCUSSION

A medico-surgical emergency of non-obstetrical cause complicates approximately one pregnancies en 500 to 700 [2,3]. These different pathologies ultimat Ely requiere surgery

en 0.2 to 2% of cases with acute appendicitis and acute cholecystitis in the first row [5-7]. Two of Our patients présente with acute appendicitis Complicated by absces and peritonites respective. Acute appendicitis Is the Most Common digestive Surgical emergency dring pregnancy, with an estimates prevalence between 1 to 4/2000 pregnant women, or round 25% of non-obstetrical Surgical emergencies [8]. In Our patients, Complicated appendicitis Is diagnose in the 1st trimestre. The prevalence of acute appendicitis Is hier dring the first Two trimestres of pregnancy. The incidence per quarter Is 32, 42 and 26% [9,10]. In Miloud *et al*'s study of 29 cases of acute appendicitis in pregnancy, 75% of appendicitis occlure in the first trimestre [10]. However, pregnancy dose not change the over all incidence of appendicitis [1,10-13]. In Our Two patients, the diagnoses was not difficile. The clinicat signes in the first trimestre, when the uterus Is not enlarged, are no different from these seen in non-pregnant women. These are pains That site at the leve of the right iliaque fosa Otten Associate with a fébrile state. Nausee and vomitng are Common at This Age of pregnancy. Physiologically, the uterus is not accessible to abdominal palpation before 12 Week of amenorrhée (AS). It becomes palpable at the end of the 12th SA here it is measured at round 8 cm and recaches the ombilics over time, mesurant on aéage 32 cm [7]. This uterus pushes back the Appendix graduelle making It the Seat of apical symptomatologie, hence the essential use of biologie and Imaging. Hyperleucocytoses was found in Our Two patients with Complicated appendicitis. The hémogramme is difficile to interprete due to the Physiologically hyperleucocytoses of pregnancy [10]. CRP can be normal. These Two examinassions are of minimal interest in the diagnoses of appendicitis dring pregnancy [10]. Ultrasoude can confirme the diagnoses of acute appendicitis en 40% of cases [14]. This diagnoses becomes difficile in the 2nd and 3rd trimestre because of the appendiculaire accent and the size of the uterus. Appendicitis was Complicated by abscess and peritonites in our two patients. The Delay in consultation (10 days and 8 days respective) is probable the main factor implicated in the occurrence of these complications. Delay in diagnoses exposes You to the Risk of complications from appendicitis to appendiculaire perforation. The latter is Associate with a fetal loss rate ranging from 20 to 35% (compared to 1.5% in the absence of perforation) [10]. Some have reported an incidence of appendiculaire perforation of 66% when surgery has been postponed for more than 24 hours [1,9,10,15]. Among Othe consequences, uterine contractions are very frequent (83% of premature contractions in case of peritonites) and the rate of premature deliveries during the 3rd trimestre can excede 50% [10,15]. The treatment of acute appendicitis in pregnant women is Surgical. It consists of an appendectomy [10]. The approche route depends on several parameters such as gestationnel Age, the stage of appendicitis, the patients build, the presences of an abdominal scare and the surgeons preference. An enlarged Mac Burney incision makes it easy to perform appendectomy in the first trimestre. Others prefer Jalaguier's incision and mid-umbilical laparotomie over everything in the 2nd and 3rd trimestres [10,15]. Acute appendicitis outside pregnancy is a documente and valida Ted indication for a laparoscopique approche [16]. Durring pregnancy, This

approche raies man feras : damaging the pregnant uterus, injuring it during the introduction of the trocars and impairing fetal well-being by the CO₂ of the pneumoperitoneum [17,18]. However, the literature reports new series with favorable consequences for the fetus and the mother for laparoscopies carried out even after 28 weeks [19]. Sadot *et al.* Reported a series of 65 pregnant and operated patients with acute appendicitis [20]. Forty-eight patients underwent laparoscopy. The authors concluded that this approach is feasible and safe during the different trimesters of pregnancy.

CONCLUSION

Digestive emergencies during pregnancy are relatively rare. Their diagnosis is not easy in the 2nd and 3rd trimesters of pregnancy. Acute appendicitis remains the most common. Its delay in diagnosis and therapy increases maternal-fetal mortality and the risk of abortion or premature birth.

Conflicts of interest

The authors declare they haven't conflict of interest.

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