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Cornual Pregnancy Presenting as Missed Abortion: A Rare Case Report

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Abstract: ***This case report discusses a rare instance of cornual pregnancy initially presenting as a missed abortion. A 34-year-old woman with a history of recurrent pregnancy losses presented with amenorrhea and spotting. Misdiagnosed initially, further imaging and diagnostic tests revealed a cornual ectopic pregnancy. The patient underwent successful laparotomy and cornual resection, highlighting the importance of accurate diagnosis and management of such cases to prevent life-threatening complications.***

Keywords: Cornual pregnancy, Ectopic pregnancy, Missed abortion, Obstetrics

1. Introduction

Implantation of a developing blastocyst outside the endometrial cavity is known as an ectopic pregnancy. Statistically, approximately 2% - 5% of these occur in the interstitial or cornual regions of the uterus [1, 2]. Clinicians commonly regard all types of ectopic pregnancies in the normal cornual region of the uterus as "Cornual" ectopic pregnancy [3, 4, 8]. It is essential to understand the terminology surrounding cornual, angular, or interstitial pregnancies because the findings, management, and outcomes are different in each of the 3 ectopic pregnancies [5]. These 3 forms of ectopic pregnancies are often lumped together, and clinicians sometimes have ambiguity in arriving at a correct diagnosis based on history and imaging [6]. Interstitial pregnancies account for 2% - 11% of tubal ectopic pregnancies and constitute approximately 20% of deaths [7]. Radiologists and several practitioners have used the term cornual and interstitial ectopic pregnancy interchangeably [7, 8]. In the literature, true cornual pregnancy is located in the rudimentary horn of the unicornuate uterus or the rudimentary horn of a septate or bicornuate uterus [9], [10], [11], [12]. Therefore, some authors synonymously use the term "cornual" pregnancy with "rudimentary horn" pregnancy [13]

Regardless of the confusion around the terminology for cornual pregnancy, the sonographic criteria for this type of pregnancy are an empty uterine cavity, a gestational sac located eccentrically (1 cm from the lateral wall of the uterine cavity), and a thin myometrial layer (<5 mm) surrounding the gestational sac [10]. The biggest concern for cornual pregnancy is the potential to rupture due to the lack of myometrial support surrounding the delicate gestational sac [14].

In general, there are numerous risk factors for ectopic pregnancies, such as tubal pregnancy, ectopic pregnancy, intrauterine devices, pelvic inflammatory diseases, salpingitis and infertility. Furthermore` exposure to diethylstilbesterol, age > 40 years, smoking, previous pelvic surgeries and assisted reproduction techniques have been implicated as potential risk factors for ectopic pregnancy [11, 15, 16]. Ipsilateral salpingectomy is the only known etiological factor specific to interstitial ectopic pregnancy [17]. In this paper we discuss a case report where missed abortion turned out to be cornual ectopic pregnancy and how it was managed.

2. Case Report

A 34 - year - old woman presented to our Gynaecology OPD with amenorrhea of 2 months and a history of spotting per vagina for 20 days. She had a history of previous four recurrent pregnancy losses. Upon primary clinical assessment, she was advised to get an ultrasonography. initially, a USG was done at a private hospital which was suggestive of missed abortion for which she had undergone Dilatation and curettage twice at a private hospital before coming to our OPD. In view of continuous spotting post procedure again a USG was done which was suggestive of retained products of conception in right accessory horn which was of 23 mm. This made us suspicious of the ultrasonographic findings and an MRI was ordered. The MRI report suggested an alternate diagnosis of right cornual ectopic pregnancy [Fig 1]. Beta - HCG was also sent. The value came out to be 66, 000 favouring the diagnosis of ectopic pregnancy. The patient underwent laparotomy with cornual resection and was attached to infertility OPD in our hospital. [Fig 2 a, b, c]

Figure 1

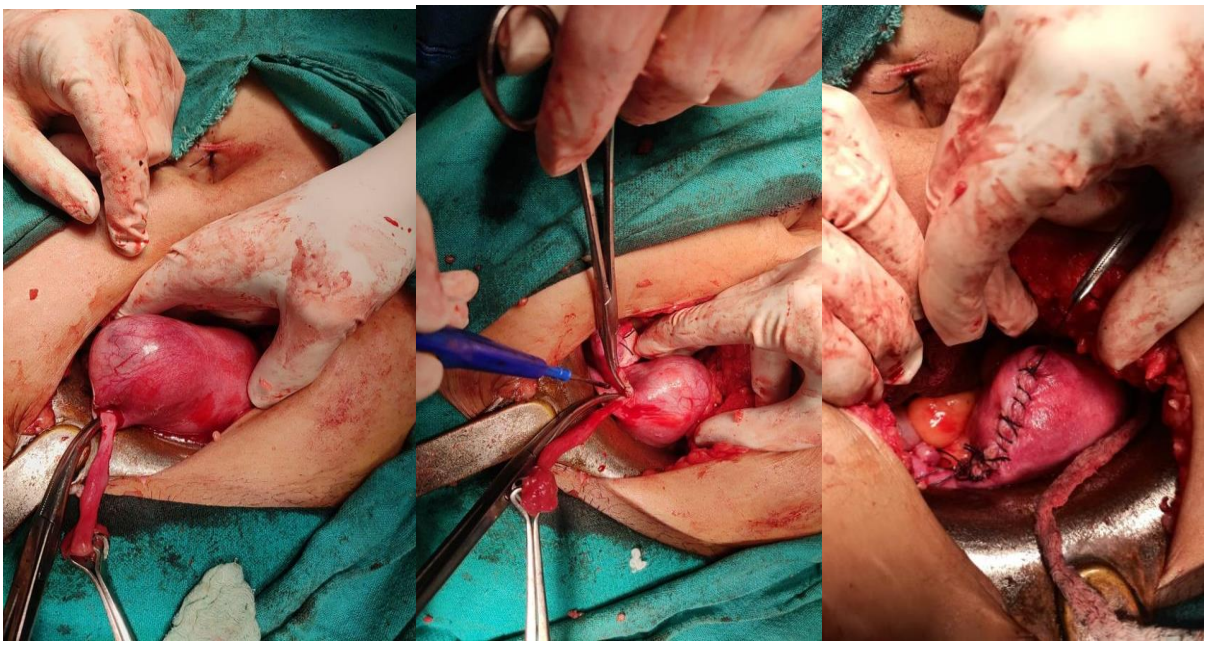

Figure 2 (a) (b) (c)

3. Discussion

We believe that the distinction between interstitial and angular pregnancy becomes even more complicated when gestation enters the second trimester, as the interstitial line is lost [15]. Moawad et al. [9] suggested that interstitial pregnancy is occasionally referred to as cornual pregnancy and incorrectly confused with angular pregnancy. Early diagnosis of cornual or interstitial pregnancy is recommended by many authors to appropriately manage these pregnancies [20, 16]. Gestational age is critical for managing cornual, interstitial or angular pregnancies. Angular pregnancy has the added advantage of being in the endometrium and having relatively more myometrial support than the other 2 types of ectopic pregnancies [18].

Interstitial pregnancies can continue to grow past the first trimester until they manifest life - threatening symptomatology later in pregnancy, especially in the second trimester [19]. It is unfortunate that none of the healthcare professionals was thinking about ectopic pregnancy in the cornual region in our patient. A timely diagnosis of this abnormal pregnancy would have prevented the patient from experiencing a life - threatening hemorrhage or a worse prognosis. This case illustrates the need for clinicians to understand this dubious diagnosis in any pregnant woman presenting with complex symptomatology in the pelvic region, particularly during the second and third trimesters.

4. Conclusion

Cornual pregnancy is a very rare and potentially dangerous condition. Diagnosis of cornual pregnancy sometimes cannot be made on ultrasound examination, as in this patient and an alternate imaging modality like MRI should be used. This patient presented to us as a case of missed abortion but later turned out to be a case of cornual ectopic pregnancy and managed accordingly. Patients with a history of cornual pregnancy should be explained about the risks of the next

cornual pregnancy and the need for elective caesarean section in a subsequent pregnancy to evade the risks of uterine rupture

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