

Diagnostic Challenges in Chronic Ectopic Pregnancies: Ultrasonographic Insights

Nesrine Souayeh, Haithem Aloui, Asma Belghith, Hadhami Rouis, Ameni Mezni, Chaouki Mbarki, Hajer Bettaieb

University of Tunis el Manar, Faculty of medicine, Gynecology and Obstetrics department, Ben Arous Regional Hospital, Tunis, Tunisia, University of Tunis el Manar, Faculty of medicine, Tunis, Tunisia, University of Tunis el Manar, Faculty of medicine,



INTRODUCTION/BACKGROUND

Chronic ectopic pregnancies (CEPs) represent a rare and often under-recognized form of ectopic gestation, typically evolving insidiously over weeks. Unlike acute presentations, CEPs frequently lack overt clinical signs, leading to delays in diagnosis. Their imaging features, particularly on transvaginal ultrasound, often mimic pelvic tumors or complex adnexal masses, posing a diagnostic dilemma. Early recognition of these atypical presentations is essential to prevent complications and ensure appropriate surgical intervention. This study aims to improve awareness of this rare clinical entity among gynecologists and radiologists.

OBJECTIVES/AIMS

To highlight the diagnostic difficulties associated with chronic ectopic pregnancies (CEPs), focusing on their deceptive ultrasonographic presentations that mimic pseudo-tumoral masses. The study aims to underline the importance of recognizing this rare clinical entity to improve diagnostic accuracy and patient outcomes.

METHODS

This is a retrospective analysis of 16 cases of chronic ectopic pregnancies complicated by encysted hematocele, emphasizing their misleading ultrasonographic findings and subsequent management.

Sixteen women with a mean age of 33 years were included. Selection criteria included cases presenting with subacute pelvic pain, menometrorrhagia, and sonographic findings suggestive of complex pelvic masses. Clinical histories revealed risk factors for ectopic pregnancy such as prior cesarean sections (n=8) and intrauterine device use (n=3).

Transvaginal ultrasound and, in selected cases, MRI were utilized for imaging. The final diagnosis was confirmed through laparoscopy and histopathological examination.

CONCLUSIONS

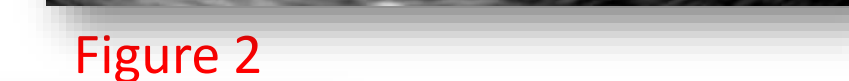
Conclusions
Chronic ectopic pregnancies pose significant diagnostic challenges due to their atypical presentations and low beta-hCG levels. Misleading ultrasonographic findings necessitate a high index of suspicion, especially in patients with risk factors. MRI can complement ultrasound for precise anatomical evaluation. Laparoscopy remains essential for definitive diagnosis and treatment. Further research should explore diagnostic algorithms to distinguish CEPs from pelvic tumors effectively, thereby guiding timely and appropriate management.

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RESULTS

Patients presented with subacute pelvic pain, menometrorrhagia, and occasionally signs of subocclusion. On pelvic examination, Douglas pouch tenderness with a bulging mass was noted. Beta-hCG levels were low (mean: 98 mIU/mL; range: 50–322 mIU/mL) and even negative in two cases. Ultrasound findings showed heterogeneous adnexal masses resembling tumoral structures and retro-uterine hematoceles. MRI provided better anatomical delineation, revealing gestational sacs within distended fallopian tubes and hematosalpinx with hematocele sealing tubal wall rupture. Laparoscopy confirmed pelvic adhesions and tubal ectopic pregnancies in all cases. Surgical interventions included adhesiolysis, hematocele drainage, and salpingectomy in two patients.



Figures 1, 2, and 3: Patient Z.A. presented with pelvic pain and metrorrhagia. Beta-hCG level: 84 IU/L. Ultrasound showed a retro-uterine hematocele appearing as a heterogeneous mass related to blood clots, with an empty uterus and a decidualized endometrium

Figures 4 and 5: Ultrasound: complex adnexal mass. MRI: enhanced analysis and identification of pelvic anatomical structures. It revealed a gestational sac within a distended fallopian tube containing a hematosalpinx, along with a hematocele sealing a tubal wall rupture (see schematic representation).

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