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ABSTRACT

20 **Title:** Incidental Cornual Pregnancies & Management: A Case Report and Review of the

21 Literature

22 **Background:**

23 Ectopic pregnancy is one of the leading causes of maternal mortality and morbidity. New  
24 diagnostic measures and criteria, along with increased awareness, have slightly decreased rates  
25 of ectopic pregnancies. The two major categories of ectopic pregnancy locations are tubal and  
26 non-tubal. Tubal includes the area between the distal and proximal fallopian tubes; non-tubal  
27 includes cornual, interstitial, cervical, and abdominal pregnancies. Cornual and interstitial are  
28 often used interchangeably, although the locations are different and some articles suggest that  
29 they should be considered clinically separate. Risk factors for these pregnancies include prior  
30 history of an ectopic pregnancy, damage to the fallopian tubes from past pelvic infections (i.e.,  
31 pelvic inflammatory disease), and history of prior surgery involving the pelvis and/or fallopian  
32 tubes. Additionally, cornual and interstitial ectopic pregnancies do not usually follow the typical  
33 pattern of ectopic pregnancy presentation due to myometrium distensibility, making it difficult to  
34 diagnose them clinically and with imaging.

35 **Objective:** To report a rare case of an incidental cornual pregnancy found in the setting of  
36 trauma.

37 **Study Design:** Case report

38 **Results:** The prevalence of cornual pregnancy is estimated to be 2% of all ectopic pregnancies,  
39 but are a significant cause of pregnancy-related mortality and morbidity when overlooked,  
40 misdiagnosed, or diagnosed late. A 24-year-old G4P1031 female presented as a trauma alert for a  
41 motor vehicle accident with multiple gunshot wounds in the abdomen, right lower extremity, and  
42 left lower extremity. On arrival, she was normotensive and tachycardic with a Glasgow Coma  
43 Scale of 7, requiring intubation. Preliminary CT readings identified liver damage, rectal injury,  
44 right iliac artery damage, and a defect of the anterior uterine fundus with a hematoma with  
45 concerns of a uterine rupture. Patient was then taken to the operating room for an emergent

46 exploratory laparotomy. Intraoperatively, the fetus was found and removed along with remaining  
47 products of conception (POC) in the left cornual space. The left and right fallopian tube were  
48 repaired. Notably, the patient had multiple episodes of a temperature over 38 °C with  
49 leukocytosis postoperatively, prompting sepsis protocol initiation. Broad-spectrum antibiotics  
50 were started while awaiting blood culture results. Culture results showed no growth. At  
51 discharge, the patient's pain was well controlled, and she was hemodynamically stable.  
52 Pathology report determined that the removed POC were adipose and fetal membranes with an  
53 estimated gestational age of 7 weeks with an intact amnion.

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55 **Conclusions:** In many cases cornual pregnancies are not detected until complications occur.  
56 Due to distensibility of the myometrium, these pregnancies can go unnoticed while the patient  
57 remains asymptomatic. Relevant to this case, a PUBMED search for “cornual pregnancy  
58 management” yielded 134 case reports in the English language. Many of the published case  
59 reports about cornual/interstitial ectopic pregnancies describe unruptured pregnancies with mild  
60 symptoms the proceeded with medical management using methotrexate. Patients experiencing  
61 ruptured non-tubal ectopic pregnancies and emergent signs and symptoms are more likely to  
62 receive immediate surgical attention. It is also important that these patients are counseled about  
63 contraceptive options and mental health resources due to potential mental and emotional trauma.