

Navigating an interstitial heterotopic pregnancy: A case report

Rayhan Karimi, DO¹, Rachael McCabe, MD¹

1. VCOM-Carolinas

Abstract

CASE INTRODUCTION: Interstitial heterotopic pregnancies (IHPs) are the simultaneous presence of an intrauterine pregnancy and an ectopic pregnancy located in the cornua of the uterus. One in 30,000 pregnancies are heterotopic and out of those, less than 4% are interstitial heterotopic. Given the rarity of these cases, treatment decisions frequently rest with the surgeon. In this case, cornuostomy proved optimal, resulting in minimal uterine impact, preservation of the intrauterine pregnancy (IUP), and no maternal complications.

CASE DESCRIPTION: A 28-year-old G3P1011, asymptomatic female, presented to the clinic for routine ultrasound, which demonstrated two concurrent pregnancies, an IUP and an ectopic pregnancy. The pregnancies were at 8-week gestation with cardiac activity, displaying the emergent need for intervention. Ultrasound showed the location of embryo A was in the ampulla of the fallopian tube, while embryo B was implanted normally within the uterus. The patient was transferred from clinic to the operating room (OR) for surgical intervention. Diagnostic laparoscopy was performed in the OR and after visualization, it was found that the ectopic was not fully tubal, but rather cornual, prompting the diagnosis of interstitial heterotopic pregnancy. Initial attempts at excising the ectopic pregnancy using Endoloop and Ligasure were hindered by extensive vascularization of the ectopic implantation site, leading to sudden hemorrhage. The surgical approach was changed to laparotomy and hemostasis was achieved. An incision was made into the right cornua and a surgical spoon was employed to effectively extract the ectopic products. A right cornuostomy, right salpingectomy, and subsequent repair of the right cornua was completed. She progressed to deliver a healthy infant at 36 weeks via cesarean section as she was treated as a high-risk pregnancy.

DIAGNOSIS: Due to the presence of an intrauterine pregnancy concurrent with an ectopic in the cornua of the uterus, this patient was diagnosed with an interstitial heterotopic pregnancy and successfully treated with surgical cornuostomy.

DISCUSSION: Interstitial heterotopic pregnancies (IHPs) are an exceedingly rare occurrence, and the absence of evidence-based first-line therapy complicates their management. Currently, treatment options encompass a spectrum of interventions, such as cornual resection, KCl or methotrexate injections, expectant management, and the less common cornuostomy. These cases pose a challenge due to the potential for severe hemorrhage, uterine rupture, fetal anomalies, and the demise of the intrauterine pregnancy (IUP). Surgeons are tasked with a delicate balance, considering maternal well-being, future fertility, and the viability of the IUP. Considering the successful maternal outcomes, minimal uterine damage, and the birth of a healthy infant, the proposition emerges that cornuostomy should be deemed a promising treatment option for IHPs in the future, urging clinicians to explore this approach further. Cornuostomy minimizes intraoperative blood loss, lowers the risk of uterine rupture in subsequent pregnancies, and enhances the prospects for future fertility by preserving fallopian tube integrity.