

Caesarean Scar Ectopics: A Review of Management Options and Treatment Outcomes in a Tertiary Setting.

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Introduction

Caesarean scar pregnancy (CSP) is a late complication of caesarean delivery, that occurs as a result of implantation within the uterine scar of a previous section. It is an uncommon, but potentially life-threatening condition, and therefore awareness and early diagnosis is critical. In Australia, approximately 30% of women give birth via caesarean section¹. Current estimate of CSP is estimated at a range of approx 1:1,800 to 1:2,500 pregnancies^{1,2,11}. Possible risk factors include previous caesarean section or myomectomy, previous D&C, adenomyosis and IVF¹¹.

Early diagnosis of CSP is critical, as untreated or inadequately treated CSP carries high rates of maternal morbidity and mortality: including haemorrhage, uterine rupture, hysterectomy and maternal death^{4,5}.

Several treatment options are available however, there is currently little consensus on the optimal way to manage women in terms of clinical effectiveness and patient safety.

Objectives

This study proposes to review the management of nine (9) caesarean scar pregnancy cases at the Gold Coast University Hospital over a five-year period, with the objective to identify commonly employed treatment modalities and outcomes and complications associated with each.

Methods

Retrospective review of all CSP cases over five years in a large tertiary obstetric unit in Queensland. Data was processed using IBM SPSS Statistics 24.



Results

Nine CSP were diagnosed; averaging one case per year for the period examined. Average maternal age was 34 years, and patients had a history of between one and five previous caesarean sections. Average BMI was 23. Diagnosis occurred on average at 5+6 weeks gestation (between five and seven weeks gestation). Four case had live FHR noted at time of diagnosis.

All patients were initially managed with IV or IM Methotrexate (MTX) dose, as per Qld Health ectopic pregnancy regime. Seven participants received IV dosing initially, one received IM initially, whilst one patient received both initially. Six patients required further management including a single repeat MTX dose (two patients). Three patients required further surgery such as hysteroscopy and/or wedge resection. One patient required blood transfusion due to acute presentation with PV bleeding.

One patient required blood transfusion due to acute presentation with PV bleeding. There was no incidence of infection or VTE.

Rate of subsequent pregnancies was only documented for four participants, none of whom were noted to have had further pregnancies.

Three patients were lost to follow-up for various reasons including inter-hospital transfer of care. On average, it took 9.8 weeks from time of diagnosis with CS ectopic, for bHCG levels to become negative (between 7 and 15weeks).

Conclusion

We recommend the use of Methotrexate (IV /IM dependant on serum bHCG level) as an effective first line management for CSP, unless contraindicated, especially for women keen to conserve their fertility. Surgical management is only considered due to failure of medical management, complications such as bleeding/pain/infection, and expected poor patient compliance to follow up.

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