

# Surgical management of caesarean scar ectopic pregnancies: a case series

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## INTRODUCTION

Caesarean scar ectopic pregnancies (CSP) is thought to occur from blastocyst implantation through a microscopic tract that develops in the incompletely healed scar of a caesarean section (CS). Estimates from 2003 and 2004 suggest that the incidence of CSP ranges from 1:1800 to 1:2216 pregnancies, and these numbers are rising exponentially.<sup>1,2</sup> Despite the rising incidence of CSP, however, there is no consensus or evidence-based guidelines or protocols for management.

There are a range of treatment options<sup>6</sup> which depend on the following factors: the size of the pregnancy, presence or absence of uterine continuity across the gestational sac,  $\beta$ -hCG levels, future fertility wishes and haemodynamic status.<sup>3</sup> Management options include: expectant management, systemic medical management, local injection, uterine artery embolization and surgical management. Various combinations of these options have also been described,<sup>4</sup> and in many situations, expectant management is considered inappropriate due to high risk of rupture.<sup>5</sup>

The aim of this study was to review our experience in identifying the clinical presentations, and management outcomes of patients with CSP over a five year period.

## METHODS

A retrospective case series of all women presenting with a CSP to a single tertiary centre in South Australia between January 2014 and December 2019. Clinical and laboratory information was extracted from medical records of all identified six cases.

## RESULTS

Six cases of CSP were diagnosed (Table 1). The median maternal age was 34, gravity 5 and parity 2. The median interval between the most recent caesarean section and the CSP was 2.5 years and median gestational age at diagnosis was 6.8 weeks. The most common presenting complaint was vaginal bleeding. The majority of patients, 5 out of 6 (83.3%) had ultrasound scans identifying a diagnosis of a CSP. The remaining case was confirmed on histology at surgical management. Five out of 6 (83.3%) underwent successful primary surgical management, whilst the sixth initially underwent systemic methotrexate which failed and then proceeded to secondary surgical management without complication.

Table 1: Patient treatment and outcomes.

Case number	Gestation (weeks)	Initial management	Additional interventions required	Total bleeding (mL)
1	6 + 1	Surgical hysterotomy	N	150
2	6 + 4	Methotrexate & KCL administered intrasac	N	0
3	5 + 5	Systemic methotrexate	Y (Laparoscopy 2 weeks post initial methotrexate dose)	<200 (after surgical)
4	11 + 0	Uterine artery embolization, intrasac methotrexate and KCL + D&C	N	200mL post D&C
5	7 + 0	Surgical laparoscopy	N	50
6	7 + 6	Surgical: D&E GTOP	N	<50

## CONCLUSION

Recent audits have been showing a transition from favouring medical management to surgical management due to a decreasing success rate of medical management. This study adds to the body of evidence in support of the use of surgical management over medical management for the treatment of CSPs.

## REFERENCES

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