

## OUTCOMES OF NONSURGICAL VERSUS SURGICAL TREATMENT OF CESAREAN SCAR PREGNANCIES IN THE FIRST TRIMESTER

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### **Abstract**

**Objective:** To compare outcomes of nonsurgical versus surgical treatment of Cesarean scar pregnancies (CSP) in the first trimester.

**Design:** Retrospective case series.

**Setting:** Single large tertiary care center in New England.

**Patients:** All women diagnosed by ultrasound with CSP and treated in the first trimester from 2000-2012.

**Interventions:** None.

**Main Outcome Measures:** Need for additional treatments and major complications including hemorrhage or emergent hysterectomy.

**Results:** Thirty-three cases of singleton CSP were identified through review of the obstetric ultrasound records. Of these pregnancies, 23 (66%) were treated in the first trimester including 12 treated surgically and 11 treated nonsurgically. Gestational age at treatment was significantly later for the surgical versus nonsurgical treatment groups (median 9.5 weeks versus 6.9 weeks, respectively,  $p < 0.01$ ). Nonsurgical therapy, however, was associated with a higher rate of needing further treatment (45%) than surgical therapy (17%) although this difference was not statistically significant ( $p = 0.19$ ). Combination treatment with intrasac potassium chloride (KCl) plus systemic methotrexate (MTX) was the most effective of the nonsurgical treatments with none of these patients requiring further treatment, versus 5/8 (62%) of those initially treated with a single agent ( $p = 0.18$ ). Only one patient (intrasac KCl group) experienced hemorrhage, and none of the patients in this series required emergent hysterectomy. Data on subsequent pregnancy outcomes were available for 13 pregnancies from 11 patients with only one documented recurrent CSP.

**Conclusions:** Over a twelve-year period, no patient with CSP treated with nonsurgical or surgical therapy in the first trimester required an emergency hysterectomy. Similarly, only one hemorrhage was observed, which occurred in a patient who was treated initially with intrasac KCl injection alone. Of the nonsurgical therapies, combination treatment with intrasac KCl plus systemic MTX appears to be the most effective. Surgical treatment with suction dilation and curettage (D&C) or laparoscopic resection may be more appropriate for patients presenting at a later gestational age. Although data is limited, the risk of recurrent CSP in subsequent pregnancies appears to be low.