# Transvaginal removal of ectopic pregnancy tissue and repair of uterine defect for cesarean scar pregnancy

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## **Summary**

Purpose: This work aimed to introduce a new surgical operation for cesarean scar pregnancy (CSP). Materials and Methods: Transvaginal removal of ectopic pregnancy tissue and repair of a uterine defect were performed in 17 CSP patients. Results: The new surgical operation was performed successfully in all cases. Conclusions: The new surgery operation is safe, effective, and minimally invasive in CSP patients.

Key words: Cesarean scar pregnancy; Transvaginal operation.

### Introduction

Cesarean scar pregnancy (CSP) is rare type of ectopic pregnancy and belongs to long-term complications of low segment cesarean sectioning. With the increase in cesarean rates worldwide, the incidence of CSP gradually increased over the years. If not diagnosed and treated, CSP is potentially life-threatening and may lead to severe complications, such as uncontrolled hemorrhage and even hysterectomy [1-3].

#### **Materials and Methods**

From September 2011 to January 2012, transvaginal removal of ectopic pregnancy tissue and repair of a uterine defect were performed in 17 CSP patients which were diagnosed with transvaginal sonogram in this hospital. Regarding the surgical technique, the uterus, (Figure 1) low segment was exposed through the anterior vaginal wall and the peritoneum incision was folded back. The uterine defect was an obvious sag in the lower segment. Ectopic pregnancy tissue was removed after a low-segment incision was made to the uterus (Figure 2). The uterine defect and vaginal wall were then both sutured (Figure 3).

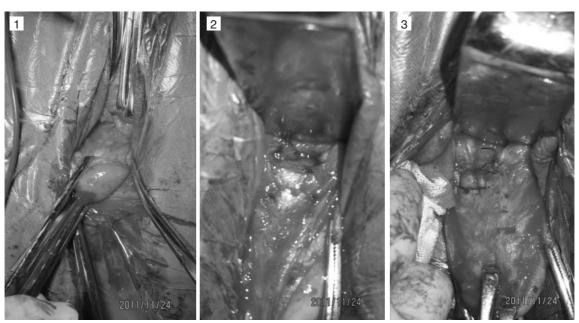


Figure 1. — Exposing of lower uterine segment.

Figure 2. — Transvaginal removal of ectopic pregnancy tissue.

Figure 3. — Repair of lower uterine segment.

#### Results

In all cases, transvaginal surgery was successfully performed. The average operation time was 40 minutes and average bleeding was 20 ml. Serum beta-human chorionic gonadotropin ( $\beta$ -hCG) levels declined to normal levels within a month after surgery.

## Discussion

Transvaginal removal of ectopic pregnancy tissue and repair of a uterine defect is a novel surgical operation and it includes several advantages. Firstly, repair of the uterine defect can prevent secondary CSP, secondly, after transvaginal operation, patients have minimal trauma and a rapid recovery time. Lastly, it may save admission costs because the patients remain hospitalized for only three to four days. Overall, based on this observation of 17 treated cases, the transvaginal removal of ectopic pregnancy tissue and repair of the uterine defect is safe, effective, and minimally invasive in patients with CSP.

#### References

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