# Clinical Case Reports



CASE REPORT

# Preterm premature rupture of membrane after polypectomy using an Endoloop polydioxanone suture II™

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## **Key Clinical Message**

Polypectomy using an Endoloop PDS II<sup>™</sup> during pregnancy can be responsible for miscarriage and preterm delivery. Cervical polyps should not be removed in pregnant women except in cases where a malignancy is suspected.

# Keywords

Cervical polyp, Endoloop polydioxanone suture II<sup>TM</sup>, polypectomy, pregnancy.

## Introduction

Although cervical polyps are not uncommon in pregnant women, there are no definitive guidelines for management of such polyps in pregnant women [1]. Some practitioners believe that cervical polyps detected during pregnancy should be removed owing to the associated risk of chorioamnionitis. Others hold the opinion that cervical polypectomy itself increases the risk of miscarriage and preterm delivery, and hence favor a conservative line of treatment, except when malignancy is suspected. Here, we report a case of premature rupture of membrane (PROM) at 22 weeks of gestation in a Japanese woman who had undergone polypectomy using an Endoloop polydioxanone suture (PDS) II<sup>TM</sup>.

## **Case Presentation**

The patient was a 29-year-old primigravida with a cervical polyp protruding out of the cervical canal. At 11 weeks of gestation, she had undergone polypectomy using an Endoloop PDS II<sup>TM</sup>. The histopathological examination revealed a decidual polyp. At 22 weeks and

2 days of gestation, the patient had PROM, following which the patient was referred to our tertiary care center. Although she had no uterine contractions at the time of admission, speculum examination showed clear, yellow amniotic fluid outflow. The blood test findings included a WBC count of 11,910/µL and C-reactive protein level of 1.5 mg/dL. Her temperature was 37°C and there were no clinically discernible findings of chorioamnionitis. The estimated fetal body weight was 475 g and no abnormalities were noted. She was conservatively treated with betamethasone and antibiotics to allow for fetal lung maturity. At 24 weeks and 6 days of gestation, she went into spontaneous labor and had a vaginal delivery. A female infant weighing 656 g was delivered with Apgar scores of 7 and 9 at 1 and 5 min, respectively. The infant was then admitted to the intensive care unit. The macroscopic appearance of the placenta was yellowish-white and detailed examination revealed signs of chorioamnionitis. A PDS was also detected in the placental parenchyma. We presumed that the polypectomy using the Endoloop PDS IITM was responsible for inducing chorioamnionitis, which led to preterm PROM.

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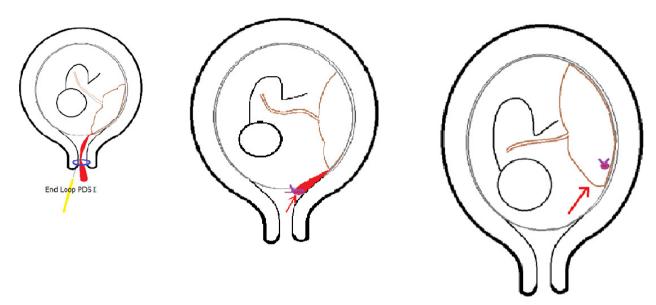


Figure 1. Resection of cervical polyp by Endoloop PDS  $II^{TM}$ . Decidual polyps showed changes in location as the pregnancy progressed, with PDS migrating into the placental parenchyma.

# **Discussion**

The findings from the present case indicate that decidual polyps move upwards with the progression of pregnancy, and that its resection can cause preterm PROM or miscarriage (Fig. 1). From our experience, we suggest that decidual polyps should not be resected during pregnancy. Based on the histopathological examination of surgically resected specimen, polyps extruding from the cervix are broadly categorized as endocervical polyps or decidual polyps. In a study by Tokunaka et al. [2], out of 41 women with decidual polyps who underwent surgical resection at a mean gestation of 11.9 ( $\pm 5.4$ ) weeks, 12.2% experienced a miscarriage within 22 weeks of gestation and 24.4% had a premature delivery within 34 weeks of gestation. Although the authors did not specify the polypectomy method used in the reported case series, the finding of PDS suture in the placental parenchyma in the present case suggests that polypectomy using an Endoloop PDS II<sup>TM</sup> could have been responsible for miscarriage and preterm delivery. Our findings suggest that cervical polyps should not be removed in pregnant women except in cases where a malignancy is suspected.

## **Conflict of Interest**

None declared.

### References

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