1. [[Effects of the relationship between adenomyotic lesions and embryo implantation site on pregnancy outcomes in pregnant patients with adenomyosis].](https://pubmed.ncbi.nlm.nih.gov/34954964/)

Xu P, Zhang YN, You BB, Zou G, Zhang XM.Zhonghua Fu Chan Ke Za Zhi. 2021 Dec 25;56(12):856-860. doi: 10.3760/cma.j.cn112141-20210831-00479.PMID: 34954964 Chinese.

## Abstract

## in [English,](https://pubmed.ncbi.nlm.nih.gov/34954964/#enc-abstract)[Chinese](https://pubmed.ncbi.nlm.nih.gov/34954964/#zho-abstract)

**Objective:** To investigate the relationship between embryo implantation site and adenomyotic lesions in pregnant patients with adenomyosis and its effects on pregnancy outcomes. **Methods:** Between January 2018 and December 2020, the clinical data of 95 pregnant patients with adenomyosis who were hospitalized in the Women's Hospital, School of Medicine, Zhejiang University, which could identify the implantation site of embryo or placenta (≥11 weeks of pregnancy) through the nuchal translucency test under ultrasonography were analyzed retrospectively. According to the relationship between embryo implantation site and adenomyotic lesions, 95 patients were divided into two groups:short-distance group (*n*=59, the embryo or placenta implantation was very close to or over the adenomyotic lesion), and long-distance group (*n*=36, the implantation site of embryo or placenta was far away from the lesion, or the implantation site and the adenomyotic lesion were on different sides of the uterus). Next, taking 28 weeks of pregnancy as cut-off value, 95 patients were divided into <28 weeks of pregnancy group (pregnancy was terminated because of adverse pregnancy outcome before 28 weeks) and ≥28 weeks of pregnancy group (pregnancy lasted to 28 weeks and later), the differences of pregnancy outcomes between the two groups in different gestation times were analyzed. **Results:** (1) The age of 95 pregnant patients with adenomyosis was (34.8±3.5) years. There were no significant differences with regard to age, uterine size before pregnancy, the proportions of primipara, assisted reproductive technology conception, endometriosis, history of estrogen and progesterone treatment, diffuse adenomyotic lesions between the short-distance group and the long-distance group (all *P*>0.05). (2) Among the 95 patients, 12 patients (13%, 12/95) had adverse pregnancy outcomes before 28 weeks of pregnancy (i.e. pregnancy <28 weeks), including 11 cases (19%, 11/59) in the short-distance group and 1 case (3%, 1/36) in the long-distance group, there was significant difference between the two groups (*χ*²=5.100, *P*=0.027). Among the 11 patients with adverse pregnancy outcomes at <28 weeks of gestation in the short-distance group, 1 case had threatened rupture of uterus before delivery of twin pregnancy at 26 weeks of gestation, 5 cases had intra uterine fetal death in the second trimester of pregnancy, 4 cases had late inevitable abortion, and 1 case had live birth of singleton at 26 weeks of gestation. In the long-distance group, one patient with adverse pregnancy outcome less than 28 weeks of pregnancy was late inevitable abortion. (3) Of the 95 patients, 83 cases were pregnant for ≥28 weeks (48 cases in the short-distance group and 35 cases in the long-distance group), and their final pregnancy outcome was all live birth. Compared with the long-distance group, the incidence of placental abnormalities (60% vs 14%), fetal distress (27% vs 6%), preterm delivery (67% vs 23%) and intrapartum bleeding [median 350 ml (range: 100-1 500 ml) vs 300 ml (range: 100-800 ml)] in the short-distance group were significantly higher (all *P*<0.05). While the gestational weeks in the short-distance group [median 37 weeks (range: 30-41 weeks) vs 38 weeks (range: 28-41 weeks)] and neonatal birth weight [median 2 790 g (range: 1 170-4 040 g) vs 3 010 g (range: 980-4 320 g)] decreased significantly (all *P*<0.05), compared with those in the long-distance group. **Conclusion:** Patients with pregnancy complicated with adenomyosis are prone to adverse pregnancy outcomes if the embryo implantation is located on or very close to adenomyotic lesions, so close monitoring and early intervention should be carried out to improve pregnancy outcomes.