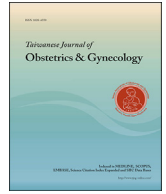




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Research Letter

An intrauterine fetal death due to horizontal uterine synechia

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Dear Editor,

A 41-year-old gravida 2, para 0 woman was referred to our fetal treatment clinic at 22 + 6 gestational weeks for evaluation of an amniotic band, but actually it was an intrauterine horizontal synechia with a constricted orifice. She had undergone

dilatation and curettage twice, laparoscopic ovarian cystectomy, and laparoscopic myomectomies twice before her current pregnancy. Ultrasound showed a horizontal synechia band in the lower third of the uterus (Figure 1A). The amount of amniotic fluid was within normal range in both the upper and lower pockets. The size of the orifice within the band was 1.73 cm. The fetal left leg was projected through the band orifice but could move up and down. As the pregnancy progressed, amniotic fluid in the upper pocket of the synechia band flowed into the lower pocket. The size of the lower pocket became larger compared with the upper pocket (Figures 1B and 1C). She was hospitalized

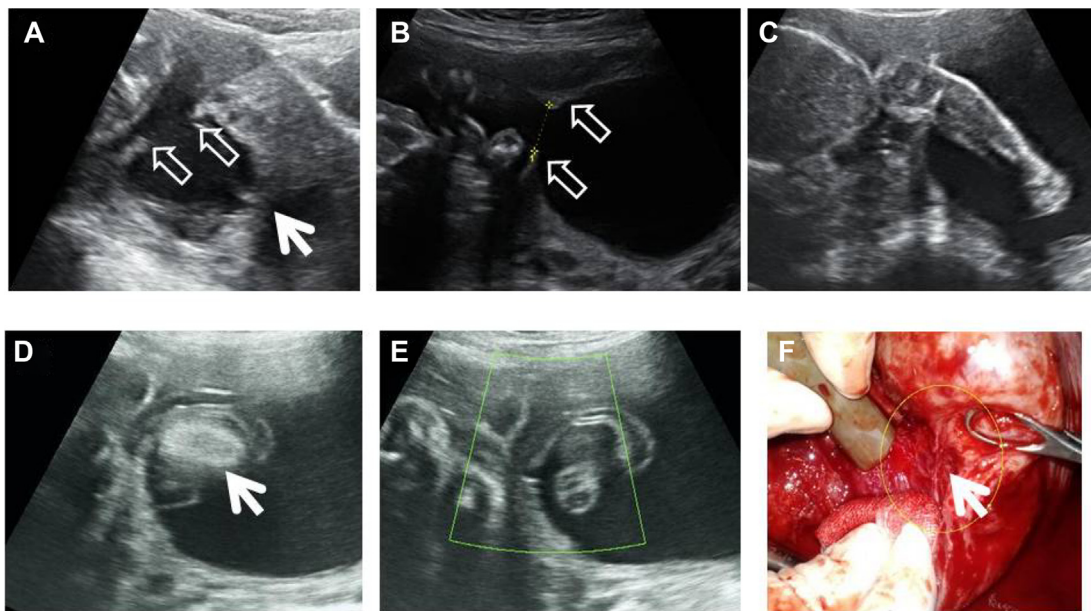


Figure 1. (A) At 22 weeks' gestation, the horizontal synechia band was visible at the uterine lower portion (open arrows: synechia bands, white arrow: cervix). (B) At 24 weeks' gestation, the size of the lower pocket became larger compared with the upper pocket (open arrows: synechia bands). (C) At 26 weeks' gestation, the fetal left leg was projected through the synechia band. (D) At 30 weeks' gestation, the cord and fetal left leg were projected through the synechia band (white arrow: fetal left leg). (E) At 30 weeks' gestation, ultrasound showed the cord and fetal left leg projected through the synechia band; color Doppler imaging showed no blood flow into the umbilical cord. (F) Surgical finding: this is the opened uterine body. Two fingers in the left upper corner grasped the hose for blood suction. The ring forceps at the right side grasped the opened uterus. Dense intrauterine synechia band was visible (white arrow) in the internal surface of the uterus.

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because of preterm labor at 25 + 4 weeks. Tocolytics were infused based on her clinical condition. The tocolytic infusion was stopped at 30 + 3 weeks when there were no further uterine contractions and no further cervical change. Weak and irregular uterine contractions developed again. Two hours later, the fetal heartbeat suddenly disappeared. Ultrasound with color Doppler image showed umbilical cord projection through the synechia band around the fetal left leg and no blood flow into the umbilical cord (Figures 1D and 1E). The cesarean operation revealed severe intra-abdominal adhesions and a dense intrauterine synechia band (Figure 1F). The fetus was stuck at the upper pole of the uterus, and the cord and fetal left leg were projected through the transverse band. The synechia bands were released using Bovie electrocauterization in order to prevent the repeat episode in the next pregnancy.

Uterine synechiae are intrauterine adhesions around chorioamniotic membranes. The incidence of uterine synechiae ranges from 0.14% to 0.47% [1,2]. The main cause of uterine synechiae is previous uterine operation such as dilatation and curettage, abortion, and cesarean section. Intrauterine adhesion formation after myomectomy is less common. Uterine tissue hypoxia is considered one of the triggers of the intrauterine adhesion formation cascade after myomectomy [3]. Generally, uterine synechiae have been considered benign findings in

pregnant women. The most important consideration in uterine synechia-related pregnancies is decreased fertility [4]. Pregnancy complications related with uterine synechiae are placental abruption, preterm premature rupture of membranes, and increased risk of cesarean delivery for malpresentation, etc. [2].

Cases of intrauterine umbilical cord projection through transverse synechia bands have been rarely reported. However, due to the life-threatening nature, it should be intervened earlier.

Conflicts of interest

The author has no conflicts of interest relevant to this article.

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