

Umbilical cord ulceration complicating jejunal atresia: two cases illustrating the spectrum of perinatal outcome

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Introduction

Umbilical cord ulceration (UCU) is a rare, potentially fatal complication of fetal intestinal obstruction, possibly caused by erosive bile-containing reflux onto the umbilical cord. When hemorrhage occurs, perinatal mortality is substantial.

Methods

Two consecutive cases of UCU complicating prenatally-diagnosed jejunal atresia, both showing triple bubble sign, seesaw bowel movement, and mild polyhydramnios.

Results

Both nulliparous patients developed PPROM and delivered preterm (34+6 and 35+5 weeks);

- Case 1: sudden bradycardia after PPROM - emergency cesarean; severe anemia (Hb 5.4 g/dL), Apgar 0/0/1
- Case 2: spontaneous delivery with normal neonatal hemoglobin
- Cord ulceration confirmed pathologically in both; Case 1 showed dissection through all vessel wall layers

Both neonates underwent successful surgical repair

Table 1. Summary of the two UCU cases

Parameter	Case 1	Case 2
Parity	Nulliparous	Nulliparous
GA at delivery (weeks)	34+6	35+5
Onset of delivery	PPROM with sudden bradycardia; emergency cesarean	Spontaneous delivery
Neonatal status	Apgar 0/0/1; pH 7.05; Hb 5.4 g/dL; resuscitation + transfusion required	Normal neonatal hemoglobin
Postnatal outcome	Successful surgical repair	Successful surgical repair



Figure 1. (A) Cord ulcerations at placental insertion with exposed vessels. (B) H&E cross-section showing ulceration with adjacent organized thrombus. (C) Higher magnification demonstrating dissection through Wharton's jelly into vessel media and intima.

Conclusion: UCU is unpredictable and potentially catastrophic; multidisciplinary vigilance, cord examination by pathology, and intensified surveillance from 30–32 weeks are warranted.