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BACKGROUND

Neonates, particularly premature infants, have an elevated risk of acquiring pressure injuries secondary to having an immature skin barrier. Neonatal pressure injuries are relatively uncommon with 80-90% of cases resulting from medical device use or birth trauma. Conversely, prenatal pressure injuries are exceedingly rare with an etiology that is poorly understood. Herein, we detail the management of a prenatal pressure injury in a neonate and conduct a review of related literature.

PURPOSE

The purpose of this review is to describe the management of a prenatal pressure injury in a neonate at our institution and review relevant literature pertaining to pressure injuries acquired prenatally.

METHODS

A total of five patients with prenatal pressure injuries were identified in the literature. Three of these injuries occurred in the context of premature rupture of membranes (PROM).



Fig 1: Linear unstageable pressure injury on DOL1.



Fig 2: DOL12 wound progression to full-thickness necrosis.



Fig 3: DOL43 wound showing significant improvement.

RESULTS

Our patient is an infant born at 35 weeks' gestation in the setting of PROM who presented with a stage 3 pressure injury on the posterior neck at birth.

- **DOL1:** wound measured 4 cm x 1.5 cm with 1 cm x 1 cm of denuded skin on the posterior neck.
- **DOL2:** wound measured 3.2 cm x 2.3 cm of non-viable skin.

The wound was then cleaned with normal saline wash, patted dry, and covered with a Mepilex Lite dressing, which was repeated daily.

- **DOL12:** wound measured 3.2 cm x 2.1 cm with full-thickness necrosis and 70% of the wound's surface area being black eschar.

Wound care was then prescribed as dressing changes every other day with application of MediHoney to the wound bed.

- **DOL43:** the wound demonstrated further improvement, measuring 1 cm x 0.5 cm.

CONCLUSION

Our experience, along with those published in the literature, suggests that PROM is a significant risk factor for prenatal pressure injury. Despite its alarming presentation at birth, intra-uterine pressure injuries respond well to standard wound care techniques and exhibit a healing trajectory similar to pressure injuries acquired postnatally.

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