A further complication of meconium stained liquor in the newborn

A 6 day old infant was referred by his general practitioner to the emergency department with a four day history of increasing difficulty in feeding.

The mother reported that, after an uncomplicated full term pregnancy, she had a male infant by vaginal delivery with no assistance required. At the time of delivery, meconium stained liquor was found, requiring soft catheter suctioning of the upper airways. The infant’s Apgar scores were 9 at one and five minutes. The baby was discharged the following day, breast feeding well. However, by day 6 of life, he was reported to be taking from one to one and a half hours to feed, with associated respiratory distress.

On examination, the baby was active with a respiratory rate of 50 breaths/min and mild sub-costal recession. During feeding, the respiratory rate rose to 80 breaths/min with appreciable tracheal tug, alae nasal flare, subcostal recession, and intercostal indrawing. The chest, on auscultation, was clear with no audible stridor. Saturation monitoring showed a fall from 100% to 88–91% (in air) during feeding. On closer inspection, there was a meconium rock (fig 1) lodged into each nasal passage, adhering to the mucosa, resulting in almost complete bilateral obstruction.

The infant was referred to the ENT team. Owing to the adherence of the meconium to the mucosa, removal by soft catheter suctioning was unsuccessful. The infant was admitted and given regular saline nasal drops. The rocks were eventually sneezed out and residual meconium removed with a soft suction catheter. At discharge, he was feeding normally without any evidence of respiratory distress or signs consistent with choanal atresia or stenosis.

Review of the literature reveals no other recent case reports of meconium nasal obstruction presenting this late after delivery. Thorough and careful soft catheter suctioning of both the nasal and oral airway of an infant from a meconium stained liquor delivery is recommended. This not only assists in the prevention of acute upper airway obstruction and aspiration in the newborn but also, as in this case, of late onset upper airway obstruction by hardened meconium in the nasal passages.

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Figure 1 Two meconium rocks, one removed from each nasal passage.