



Images in neonatal medicine

Early recognition of rusty pipe syndrome to avoid disruption of breast feeding

A 30-year-old primigravida delivered a healthy term female infant. As the newborn latched poorly in the first hours postpartum, mother performed hand expression and painlessly collected brown-coloured colostrum from both breasts (figure 1). Mother was initially advised by doctors not to breastfeed, and newborn was fed infant formula. Mother's breasts and nipples were normal on examination. Subsequently, with the provisional diagnosis of rusty pipe syndrome (RPS), mother was supported to resume breast feeding. Baby's latch improved, and mother exclusively breast fed by day 3 postpartum. Breastmilk colour progressively lightened and normalised by day 5 postpartum. At 1 month postpartum, mother was exclusively breast feeding her daughter.

This report illustrates the situation where exclusive breast feeding was interrupted due to healthcare staff's unfamiliarity with RPS. RPS describes rusty-looking breastmilk caused by the presence of blood clots due to rapid alveolar and ductal vascularisation in pregnancy and early lactation.¹ It occurs primarily in primigravidas.² The diagnosis of RPS can be made based on its typical presentation: dark-coloured colostrum from both breasts,

from multiple breast ducts, normal breast and nipple examination and resolution by 1 week postpartum.¹⁻⁴ With prompt diagnosis of RPS, further investigations (cytology, mammogram and ultrasound) to rule out other conditions (breast carcinoma and intraductal papilloma) can be avoided. Early recognition of this uncommon, self-limiting condition by healthcare staff, followed by reassuring mother that her newborn is unharmed from consumption of small amounts of blood,³ can ensure continuity of exclusive breast feeding in RPS.

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Acknowledgements We would like to thank Dr Dimple Rajgor for her help with editing, formatting and submission of the manuscript for publication.

Contributors All authors contributed to the design and implementation of the research, to the analysis of the results and to the writing of the manuscript. ZA and YPMN provided critical feedback and helped shape the analysis and manuscript writing.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not required.

Ethics approval This is a publication of data of a single case, and hence, formal domain-specific review board approval is not required as per institutional policy.

Provenance and peer review Not commissioned; externally peer reviewed.

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To cite Low JM, Amin Z, Ng YPM. *Arch Dis Child Fetal Neonatal Ed* 2022;**107**:F241.

Received 16 November 2020

Accepted 20 January 2021

Published Online First 4 February 2021

Arch Dis Child Fetal Neonatal Ed 2022;**107**:F241.

doi:10.1136/fetalneonatal-2020-321115

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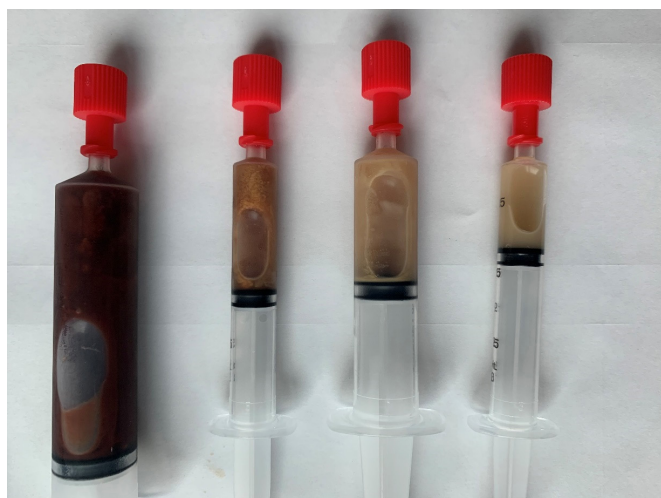


Figure 1 (From the left to right of the picture): expressed breastmilk at 24 hours of life (from mother's both breasts), 64 hours of life (from mother's right breast), 64 hours of life (from mother's left breast) and 74 hours of life (from mother's left breast).