Quality Improvement and Patient Safety

INTRODUCING A QUICK REFERENCE GUIDE FOR THE POSTNATAL WARD

Yoshua Collins-Sawaragi, Niambi Scally, Amy Douthwaite, Jessica Gannon, Katie Evans, Uma Sitramthia, Priya Ramaswamy, Croydon University Hospital

Background Quick reference guides are frequently used in medicine to provide easy access to the latest evidence. They do not replace full guidelines but are a useful adjunct to clinical expertise on busy wards.

A survey conducted in our department showed that although trainees enjoy working autonomously on the postnatal ward, 90% of trainees thought accessing our intranet hospital guidelines was time consuming. Therefore, a decision was made to produce a Quick Reference Guide, whereby trainees have rapid access to guidelines and referral pathways, while also aiming to empower trainees to work autonomously and efficiently within safe boundaries.

Objectives To introduce a comprehensive quick reference guide for postnatal ward as part of a quality improvement project (QIP).

Methods A 66 paged Quick Reference Guide was created covering the common conditions and problems encountered on the postnatal ward based on guidelines from our district general hospital and our tertiary referral centre (adapted for local use). Futureproofing was built into the design to ensure the guide stays relevant and up to date.

A questionnaire was sent to all trainees working on the postnatal ward with a copy of the Quick Reference Guide. Trainees were asked to score baseline stress levels of working on the postnatal ward on a scale of 1 to 5 (1 very stressful, 3 neither, 5 no stress) and if having this guide would be useful for their practice and in reducing stress levels. Free text area was available for general feedback.

Results 18/20 trainees responded to the survey giving a 90% response rate. This included 11 Senior House Officers (Specialist training (ST) years 1–3/clinical fellows) and 6 Registrars (ST4–5/staff grade) and one response had no mention for their grade of training. The baseline median and mode stress score was 2 on the 5-point scale indicating fairly high stress levels. All trainees (100%=18/18) responded that having a postnatal ward quick reference guide would be helpful and would reduce their stress levels when working on the postnatal ward. Free comment feedback was supportive of the guide (n=6) and included what trainees wanted in future versions (n=3).

Conclusions We demonstrate that having a comprehensive quick reference guide enables rapid access to guidelines, thereby saving time and reducing stress for trainees working on the postnatal ward. An unanticipated benefit of this creation was that outdated guidelines were identified and updated during the process. We will continue this QIP by resurveying the next cohort of trainees to ensure guidelines stay relevant while modifications to improve the guide are made for subsequent productions. A trainee will be allocated the role of updating this document at the start of every rotation.

Based on the results, the Quick Reference Guide was distributed to trainees in PDF format (for access on phones), and a printed copy created for the ward. We recommend other postnatal wards consider creating similar quick reference guides.

DEVELOPING A TEACHING PROGRAM TO SUPPORT HEALTH VISITORS IN THE MANAGEMENT OF PROLONGED JAUNDICE

Aaron Bell, Nabiela Bhakoo, Mando Watson, Rianne Steele, Imperial College NHS Trust; Imperial College Healthcare NHS Trust

Background Prolonged jaundice is very common in newborns. Investigation of the underlying cause in a timely manner is essential to rule out pathological causes, as one potential underlying cause (biliary atresia) requires prompt diagnosis and management.

An audit of the prolonged jaundice clinic at St Mary’s Hospital London identified that not all babies with prolonged jaundice were being appropriately referred to clinic. It is essential that all health care professionals seeing these patients are aware of the correct referral pathways so they are seen in a timely manner in the appropriate setting.

Objectives A quality improvement project was undertaken with health visitors which aimed to:
• Identify any barriers relating to referral to prolonged jaundice clinic
• Identify knowledge of guidelines relating to management of prolonged jaundice
• Improve understanding of referral pathways and the correct timing
• Improve communication between primary and secondary child healthcare delivery services

Methods Connecting Care for Children (CC4C) is an integrated care model focused on primary and secondary care collaboration across North West London. Through established networks, we conducted semi-structured interviews with health visitors to review knowledge of prolonged jaundice and referral pathways. These identified barriers to referral, variation in practice, and a desire for further teaching on the topic. Many did not have access to recent guidelines or referral pathways.

We created an information bundle and teaching session with information about prolonged neonatal jaundice, its treatment and investigation, and resources for parents/carers. We also focused on current referral pathways and the reasons for urgent vs non-urgent referral. Case studies facilitated further review of practice and barriers to referral. Health visitors were asked to complete pre and post-session surveys relating to prolonged jaundice, and to answer case studies one week following the session.

Results Surveys and scenario discussions identified uncertainty regarding age for referral, unease with referring to the clinic instead of ED, and that the amount of visible jaundice was being used as criteria for referral. There was good understanding of red flag symptoms. Most health visitors were not aware of current referral pathways and felt only ‘somewhat confident’ with management.

Two participants completed follow-up surveys which showed improved confidence, correct knowledge of age for referral, but continued uncertainty regarding referral to ED instead of clinic and use of the extent of visible jaundice as a marker for urgency of referral.

Health visitors felt that the prolonged jaundice information pack was useful for their consultations and felt it was appropriate for parents/carers.

Conclusions There are significant variations in practice between health visitors with management and referral of prolonged jaundice for investigation, and many felt that information was not easily available.

It is inconclusive if our teaching resulted in long-term improvements due to low response rates, but it is evident that there is short-term improvement in when to refer, and that there remains uncertainty of the mode of referral.

The CC4C network provides a unique model to facilitate teaching and communication, and it is clear that this would be of benefit for babies with prolonged jaundice.

British Association of Perinatal Medicine and Neonatal Society

1066 DO UK NICU’S USE MAGNETIC RESONANCE SPECTROSCOPY AFTER HIE?
Charlotte Burleigh, Catriona Firth, Sam Oddie. Bradford Teaching Hospitals NHS Trust
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Background Prognostication after hypoxic ischaemic encephalopathy (HIE) is challenging for both clinicians and families. The ability to predict neurodevelopmental outcomes can be improved by the addition of thalamic proton magnetic resonance spectroscopy (MRS) to MRI. Recent British Association of Perinatal Medicine (BAPM) guidance suggests where possible, MRS should be performed in assessing infants with HIE treated with therapeutic hypothermia.

Objectives To investigate use of MRS for infants treated for HIE in the UK.

Methods Between August 2020 and February 2021, a short questionnaire was sent to all UK neonatal intensive care units (NICU’s). Consultants were contacted via email and telephone. Survey responses were accepted via an online platform, post or email. If more than one response was obtained from the same unit, the first response was taken.

Results A response was received from 42 of 54 NICU’s spanning England, Scotland, and Wales.

Current MRS imaging practice

<table>
<thead>
<tr>
<th>Response</th>
<th>Number of NICU’s</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used MRS within the last year</td>
<td>18</td>
<td>43</td>
</tr>
<tr>
<td>Routinely use MRS (all babies with HIE)</td>
<td>13</td>
<td>31</td>
</tr>
<tr>
<td>MRS used but not routine</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>MRS not used</td>
<td>24</td>
<td>57</td>
</tr>
</tbody>
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Of the 24 NICU’s not currently using MRS, 18 reported that they did not have plans to introduce it. Equipment and expertise were the most commonly reported barriers to introducing MRS (each reported by around 50% respondents).

61% clinician respondents agreed or strongly agreed that they gave high importance to MRS findings when considering long-term prognosis. However, only 33% reported that MRS had increased their confidence when discussing prognosis with families.

9 NICU’s (21%) reported their imaging practice was likely to change in response to BAPM guidance.

Free text comments from NICU’s included: plans to explore MRS with their radiology department, uncertainty about the added value of MRS, concerns about sedation and acquisition time for MRS, challenges in translating research into clinical practice and comments regarding the importance of ongoing clinical developmental assessment.

Conclusions Our survey demonstrated limited current use of MRS imaging by UK NICUs, despite recommended adoption. Further education of involved professionals as to the delivery, interpretation and utility of MRS as an addition to MRI after HIE may be valuable. Neonatologists’ reported experience with MRS suggests that, whilst most find it helpful for prognostication, it is not heavily relied upon when communicating with families. This is likely to reflect the fact that, whilst superior to MRI alone, MRS does not solve the issue of prognostic uncertainty in HIE and therefore conversations with families remain challenging.

REFERENCES