

## Relaying of Neonatal Hip Ultrasound Reports

Samuel Gainé

Graduate Entry Medical School, University of Limerick

**\*Corresponding author**

Samuel Gainé, Graduate Entry Medical School, University of Limerick, Ireland E-Mail: u2samuel@gmail.com

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### Background

Developmental dysplasia of the hip (DDH) is a spectrum of anatomical abnormalities of the hip joint in which the femoral head has an abnormal relationship with the acetabulum. The importance of early detection relates to the serious consequences of a missed diagnosis that will often require surgery later in childhood.

A hip screening assessment is performed at birth and again at 6 weeks. If risk factors are present or a clinical exam abnormality is detected, the baby is referred for ultrasound (U/S) exam of the hips. If over four months of age, infants may be investigated with an X-Ray. Early treatment seeks to prevent abnormal development of the hip joint with a Pavlik harness and the need for surgical intervention.

All babies selected for early hip screening are given a date to attend for U/S exam. The results of that exam, if it has taken place, and regardless of the rationale for the U/S or its outcome, should be communicated to the patient's GP by the hospital (Recommendation 7.10)<sup>2</sup>. In addition, it is good practice for the GP to follow-up with the guardians of babies on whom a hip U/S result has not been received.

### Aims & Objectives

To record the number of hip U/S reports received by the GP for babies born in 2018, and to compare this figure to the number of babies who were noted to have been due an U/S exam without record of results being received from the hospital.

To assess whether or not a plan needs to be implemented to improve gathering of results so that appropriate follow-up on patients can be established at the GP.

### Standard/Guidelines

The findings of the hip examination, any abnormal findings and the outcomes of all screening assessments should be clearly documented in all discharge correspondence to the GP and the PHN [1].

Recommendation 7.10 - The GP and the PHN should be sent a copy of the ultrasound result and confirmation of the actions taken [2].

### Methodology

This was an audit undertaken retrospectively at the GP surgery.

A search was conducted on the computer system, Socrates, and 40 babies born to mothers attending the GP surgery in 2018 were identified. All 40 were screened for DDH at the 6-week check, recorded under the 'Investigations' tab on Socrates.

14 babies were noted under 'Investigations', 'Notes' (mostly guardian-reported data), and 'Documents' (only hospital-reported data) to have received or been due to receive a hip U/S. The number of U/S reports received by the GP from the hospital was compared to the number of U/S results not received for this cohort meeting the criteria for the national selective hip screening programme. Hospital U/S reports on babies that had not been received by the GP were collected, retrospectively, bringing the total number of reports received to 100% in the end.

### Results

Out of the 14 babies born in 2018 who received a hip U/S screening exam, their GP surgery received a total of 9 U/S reports. The rate of communication of hip U/S results from the hospital to the GP was, therefore, 64%. About 36% of all babies who had received a hip U/S examination did not have their results forwarded from the hospital to the GP.

### Discussion

5 out of 14 cases from the cohort subjected to selective screening for the serious condition DDH had no documented report of having received a hip U/S exam at the hospital in records of their GP. This highlights an area of inconsistency in the communication of U/S results, as just two thirds of infants had their reports sent on to the GP. The guardians for the other third were the only point of reference for these investigations and their outcomes.

In future, a plan may be implemented to ensure that results are received by the GP surgery via a formal contact with the radiological department to ensure appropriate information-sharing about patients under the care of the GP. This should be monitored by the healthcare professional who performed the 6-week check by way of documented reminder on Socrates to follow-up on the U/S report for that child.

A weakness of this audit is the size of the cohort, investigating one aspect of early life health checks among the myriad facing this population. However, the devastating consequences of the failure to detect DDH early in life creates a need for certainty regarding its diagnosis and management, including appropriate

communication of results from selective hip screening programmes being implemented nationally.

### **Recommendations**

U/S results should be relayed to the GP in a timely fashion following an imaging study for DDH as per Recommendation 7.102. The radiological department were informed about the inconsistency and could change practice to benefit patient care at the GP surgery. Healthcare professionals and staff at the GP surgery were made aware of the issues, and a plan will be implemented to ensure gathering of hip U/S results if they are not forthcoming from the hospital in the first 9 weeks. A date for each U/S will be obtained at the 6-week checks so that contact with the hospital can be made requesting information about a child's scheduled U/S.

### **References**

1. The Newborn Clinical Exam Handbook <https://www.hse.ie/eng/about/who/healthwellbeing/our-priority-programmes/child-health-and-wellbeing/newborn%20exam.pdf>.
2. DDH Implementation Pack <https://www.hse.ie/eng/services/publications/clinical-strategy-and-programmes/radiologyddhimplementaionpack.pdf>.

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