

# Developmental dysplasia of the –clicky- hip

Dr. Mark Brenner (ST2) Radiology, West Yorkshire Radiology Training Scheme

Dr. Shalini Nandish, Consultant Radiologist, Calderdale and Huddersfield NHS Foundation Trust

Dr. Karin Schwarz, Consultant Paediatrician, Calderdale Royal Hospital

## Background

Developmental dysplasia of the hip (DDH) is an important diagnosis to make early. It is easily treatable but delay in detection can lead to pain and disability late in life. The examination of the hips in the newborn and infant physical examination (NIPE) has a degree of subjectivity, and previous guidance deferred the decision whether the finding of a clicky hip without other risk factors needed referral for an ultrasound (USS) to local arrangements. New guidance from Public Health England now suggests that clicky hips without other risk factors should be viewed as screen negative, without the need for further investigations. This audit was set up to review local USS results to ensure this new guidance would not miss any hip abnormalities

## The examination

The patient is laid in a lateral position within a cradle, and the exposed hip joint up in the air is scanned from above, with the exam being repeated with the patient turned over on the other side.

The key information of the interest is the alpha angle, which is the angle between a horizontal line through the iliac bone, and a line connecting the bony rim of the acetabulum with the lower limb of the iliac bone.

This is demonstrated on the top left of this poster.

## Methods

In the trust 3652 USSs were performed to assess for DDH between 2012 and 2017.

A detailed review of these USSs was done for the 548 scans (in 480 patients) performed between October 2016 to September 2017.

## Results

Of the 480 different patients, 131 had clicky hips.

Of the 131 patients with clicky hips, 22 had other risk factors which would have resulted in a scan, 101 had a normal scan, but 8 patients had an abnormal initial USS and no additional risk factors.

Total population of 480 patients

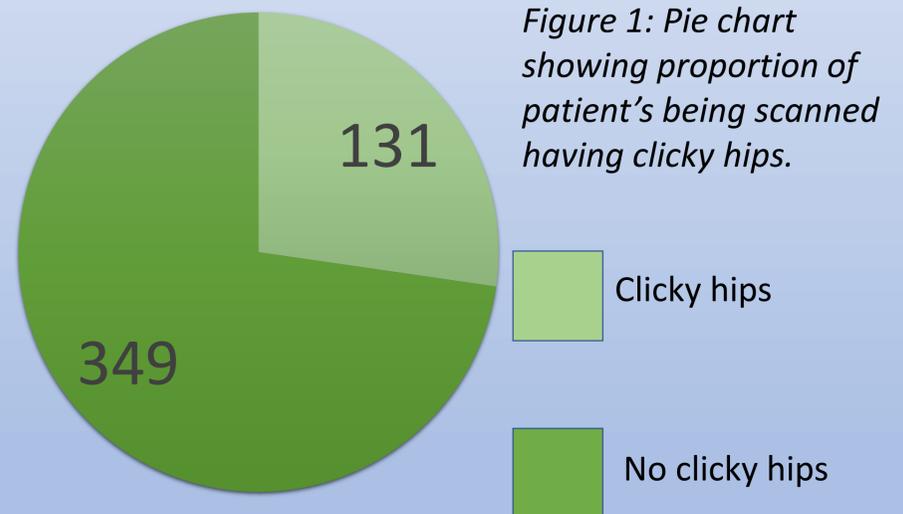


Figure 1: Pie chart showing proportion of patient's being scanned having clicky hips.

Of the 131 patients with clicky hips, 22 had other risk factors which would have resulted in a scan, 101 had a normal scan, but 8 patients had an abnormal initial USS and no additional risk factors.

131 patients with clicky hips

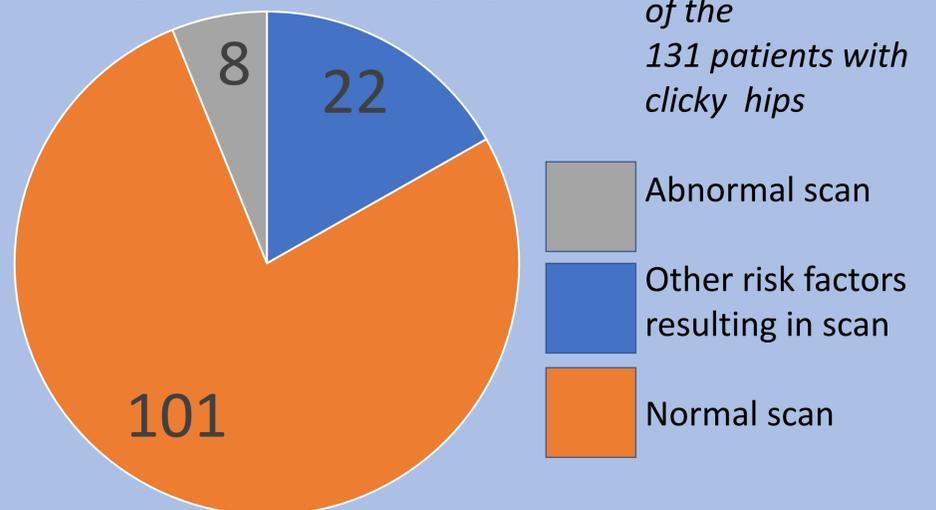


Figure 2: Pie chart of the 131 patients with clicky hips

The 8 patients with abnormal scans required further follow-up.

5 of these had normal repeat scans, but 3 remained abnormal on follow-up, and required treatment.

## Discussion

The audit showed that 3 patients with clicky hips that required treatment, would not have met the new referral criteria for a hip USS.

It was decided that locally all clicky hips require senior review to exclude a dislocatable hip and all clicky hips will continue to be referred for a hip USS.

Others units should carefully review their USS results in babies with clicky hips prior to adopting new public health guidance.