

BSUH Paediatric Guidelines

Congenital hypothyroidism (newly diagnosed)

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BACKGROUND

UK has universal screening for Congenital Hypothyroidism. Heel prick blood sample taken by midwives between Day 5 to Day 7 in this region are sent to Neonatal Screening Laboratory in Lewisham, where it is analysed for TSH levels. Usually the blood sample is screened before day 15. If TSH levels are high, then the lab informs the GP and the paediatrician, usually Dr Kanumakala.

MANAGEMENT AFTER RECEIVING THE INFORMATION

1. Liaise with the GP and clarify any doubts. Usually GP visits the family the same day and inform the parents.
2. Arrange for the baby to be seen in the hospital asap, preferably within the next 24-48 hours. GP would be able to let the parents know time & place of the appointment.
3. Examine the baby, inform the parents and provide relevant printed literature (available in SK's room)
4. Confirm the diagnosis
 - Obtain blood for full TFTs. **Always obtain two samples of blood, just to be on the safer side.**
 - Arrange for a thyroid scan via Nuclear Medicine Dept.
 - Normally I arrange for the child to come the next day, have bloods taken here at Alex, put an IV line and send for a Scan. Nuclear Medicine Department have always helped me, when requested politely in the past. The IV line can be removed after the scan.
5. Start thyroxine replacement therapy ASAP, usually soon after the scan. Do not wait for the results to come, sometimes it can take up to 2 weeks.
6. The normal starting dose is 8-10 mcg/kg/day.
 - Normally I use 25 mcg alternating with 50 mcg daily if weight above 3.5 kg; 25 mcg daily if weight between 2.5 to 3.5 and 10 mcg/kg if less than 2.5 kg.
 - Use Thyroxine tablets available as 25 mcg tablets. Even babies can take tablets and I have never had any trouble with any parent so far. Thyroxine Elixir preparation is a bit unreliable as the drug settles down to the bottom! And potentially dosage errors can happen.

7. Arrange an appointment in 2 weeks time to review the baby's progress, blood and the scan results.

ADVANTAGES OF THE SYSTEM

- Earlier start of thyroxine replacement therapy by nearly 1-2 weeks.
- Ability to get the scan done prior to thyroxine treatment. Otherwise you have to stop the medications at least for 3 days before the scan.

DIFFICULTIES WITH THE SYSTEM

- Inability to repeat the confirmatory TFTs, if blood inadequate, lost in transit or mishap to the specimen. **Hence it is very important to obtain 2 adequate blood samples for confirmatory TFTs.**

I hope these guidelines are helpful when a new baby is diagnosed and I am on leave.