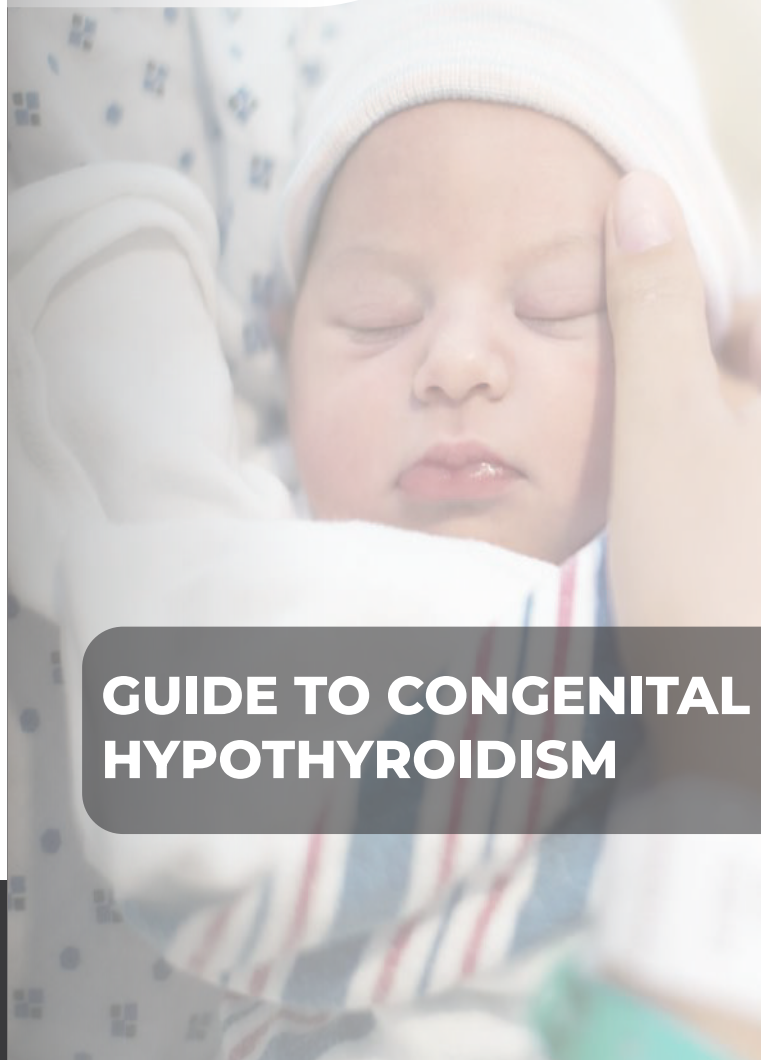
Shalamar Hospital is striving to provide our patients quality health care, at lowest possible costs. Our hospital is continually active in pioneering new treatments and therapies to improve the lives of people in our community.



GUIDE TO CONGENITAL HYPOTHYROIDISM

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WHAT IS CONGENITAL HYPOTHYROIDISM?

Congenital hypothyroidism (CHT) is a condition where the thyroid gland, located in the neck, does not produce enough thyroid hormone for the body's needs. The condition is present at birth and can be caused by absent or underdeveloped thyroid gland (dysgenesis) or one that has developed but cannot make thyroid hormone because of a "production line" problem (dyshormonogenesis).

WHAT IS THE THYROID GLAND AND WHAT DOES IT DO?

The thyroid gland produces thyroid hormone, which is essential for brain development in infancy and normal growth in childhood and adolescence. It mainly produces thyroxine (T4) with a small amount of tri-iodothyronine (T3).

HOW COMMON IS CONGENITAL HYPOTHYROIDISM?

One child in every 2000-3000 is born with CHT in the UK. Dysgenesis is more common in girls than in boys, but in dyshormonogenesis, both boys and girls are equally affected.

WHAT ARE THE SYMPTOMS OF CONGENITAL HYPOTHYROIDISM?

Most babies born with CHT look normal and have no obvious symptoms. That is why it is important to test all newborn babies. Some babies with hypothyroidism are sleepy and difficult to feed. Still, these symptoms are not specific to CHT. Prolonged jaundice, constipation, low muscle tone, cold extremities, and poor growth are some later symptoms. Prompt treatment allows children with CHT to develop within normal limits.

WHY ARE BABIES SCREENED FOR HYPOTHYROIDISM?

Untreated, CHT can lead to impaired brain development. Babies with hypothyroidism were often diagnosed late, leading to learning difficulties or mild clumsiness. However, if thyroid hormone treatment can start before the baby is about two to three weeks old, the likelihood of long-lasting problems is low.

HOW ARE BABIES SCREENED FOR HYPOTHYROIDISM?

All babies undergo a heel-prick blood test at five days of age to screen for several conditions, including CHT. The test measures a hormone called thyroid-stimulating hormone (TSH), which is produced by the brain to signal the thyroid gland to make more thyroid hormone. If TSH is high on the heel-prick blood test, a small blood sample will be taken from a vein to confirm the diagnosis.

WHAT IS THE TREATMENT FOR CONGENITAL HYPOTHYROIDISM?

If a baby tests positive for CHT, their condition should be managed by a paediatric endocrinologist or a paediatrician with a special interest in endocrinology. Treatment with levothyroxine (synthetic thyroid hormone, T4) should start without delay. The dose is calculated based on factors such as the baby's weight and will need adjusting regularly as the baby grows. Blood tests measuring thyroid hormone and TSH levels are carried out every few weeks during the first few months of life and around every two to six months during infancy and childhood. T4 is prescribed in tablets or a solution. T4 is the preferred treatment because the brain requires T4 to develop well, and the body makes T3 from T4.

Important points to bear in mind include: the heel-prick test has significantly improved outcomes for newborns with hypothyroidism; most children who receive prompt detection and treatment lead normal lives; regular visits to a paediatric endocrinologist or a paediatrician with an endocrinology focus are recommended for children with hypothyroidism; medication needs to be taken regularly, typically for life, with dosage adjustments required as the child grows; family members who have thyroid issues should consult with their owndoctor to determine if they need testing.