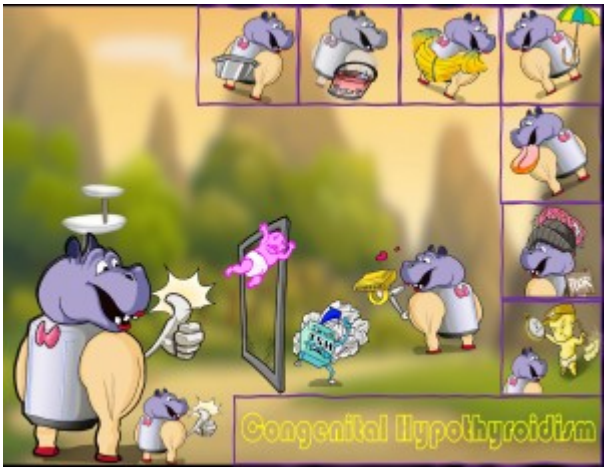
Congenital Hypothyroidism



PLAY PICMONIC

Etiology

Thyroid Hypoplasia

Thigh-droid Hippo-plates

Congenital hypothyroidism is commonly acquired sporadically, most often due to thyroid hypoplasia, dysplasia, or aplasia. Less commonly, it can be due to maternal antithyroid antibodies, goiter, peripheral resistance, and iodine deficiency.

Assessment

Asymptomatic

Thumbs-up

Congenital hypothyroidism is often asymptomatic at birth as the placenta was previously supplying maternal thyroid (T4) hormones.

7Ps

Pot-Bellied

Cooking Pot on Belly

If the neonate is symptomatic, then the **7Ps** of congenital hypothyroidism can involve the neonate being **P**ot-bellied, **P**ale, **P**uffy-faced, **P**rotruding umbilicus, **P**rotuberant tongue, **P**oor brain development, and **P**rolonged neonatal jaundice.

Pale

Pail

If the neonate is symptomatic, then the **7Ps** of congenital hypothyroidism can involve the neonate being **P**ot-bellied, **P**ale, **P**uffy-faced, **P**rotruding umbilicus, **P**rotuberant tongue, **P**oor brain development, and **P**rolonged neonatal jaundice.

Puffy-Faced

Puffy-coat Face

If the neonate is symptomatic, then the **7Ps** of congenital hypothyroidism can involve the neonate being **P**ot-bellied, **P**ale, **P**uffy-faced, **P**rotruding umbilicus, **P**rotuberant tongue, **P**oor brain development, and **P**rolonged neonatal jaundice.

Protruding Umbilicus

Protruding Umbrella

If the neonate is symptomatic, then the **7Ps** of congenital hypothyroidism can involve the neonate being **P**ot-bellied, **P**ale, **P**uffy-faced, **P**rotruding umbilicus, **P**rotuberant tongue, **P**oor brain development, and **P**rolonged neonatal jaundice.

Protuberant Tongue

Protruding Tongue

If the neonate is symptomatic, then the **7Ps** of congenital hypothyroidism can involve the neonate being **P**ot-bellied, **P**ale, **P**uffy-faced, **P**rotruding umbilicus, **P**rotuberant tongue, **P**oor brain development, and **P**rolonged neonatal jaundice.

Poor Brain Development

Poor Brain Developing-Child

If the neonate is symptomatic, then the **7Ps** of congenital hypothyroidism can involve the neonate being **P**ot-bellied, **P**ale, **P**uffy-faced, **P**rotruding umbilicus, **P**rotuberant tongue, **P**oor brain development, and **P**rolonged neonatal jaundice.

Prolonged Neonatal Jaundice

Prolonged Newborn Jaundice-janitor

If the neonate is symptomatic, then the **7Ps** of congenital hypothyroidism can involve the neonate being **P**ot-bellied, **P**ale, **P**uffy-faced, **P**rotruding umbilicus, **P**rotuberant tongue, **P**oor brain development, and **P**rolonged neonatal jaundice.

Diagnosis

Neonatal Screening

Neon-baby and Screen-door

As most neonates are asymptomatic in congenital hypothyroidism, it becomes important to rely on neonatal screening within the first 24-48 hours. TSH levels are measured, and if congenital hypothyroidism is diagnosed and addressed early, then therapy can be initiated and irreversible brain disabilities potentially avoided.

Increased TSH

Up-arrow Tissue-box

Neonatal screening to evaluate TSH levels is performed within the first 24-48 hours after birth. Elevated levels of TSH can indicate congenital hypothyroidism.

Treatment

Lifelong Replacement Hormone

Lifelong-commitment Harmonica

Congenital hypothyroidism involves the lifelong replacement of thyroid hormone with optimal normalization within 2-3 weeks in order to protect the brain from substantial damage.