

Elevated TSH or
Low T4

-Call parents immediately for confirmatory testing
-Recheck newborn screen and/or
-Obtain venipuncture for serum TSH and FT4

-TSH Elevated (>9mU/L)
-FT4 Decreased (<0.6mg/dL)
Dx: Primary CH

-Initiate LT4 therapy
Levothyroxine 10-15mcg/kg/day

Repeat serum TSH/FT4
-2-4wks after initiation of LT4 therapy
-every 1-2mo during first 6mo
-every 6-12mo until growth completed
-at more frequent intervals if compliance questioned, abnormal values obtained
-4-6wks after any dose adjustments made

-TSH Elevated (>9mU/L)
-FT4 Normal(<0.9-2.3ng/dL)
Dx: Subclinical Hypothyroidism

-TSH 9-25mU/L with normal FT4–
repeat TSH/FT4 in 1wk
-TSH >25 – initiate LT4 therapy
10-15mcg/day/day

-TSH Decreased or Normal
(<9mU/L)
-FT4 Decreased (<0.6mg/dL)
*Dx: Central (Secondary)
Hypothyroidism*

-Repeat TSH and FT4 to confirm
- Screen for other pituitary hormone deficiencies
-Consider imaging of CNS/pituitary

-TSH Normal (<9mU/L)
-FT4 Decreased (<0.6mg/dL)
in male infant
Dx: TBG Deficiency

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-TSH Decreased or Normal (<9mU/L)
-FT4 Decreased (<0.6mg/dL)
Dx: Central (Secondary) Hypothyroidism

-TSH Normal (<9mU/L) in male infant -FT4 Decreased (<0.6mg/dL)
Dx: TBG Deficiency