INDICATIONS FOR TESTING
Clinical suspicion of GHD

ORDER
IGF-1 measurement with z score

- Identified congenital, genetic, or organic disease WITH ≥3 hormone deficiencies AND low IGF-1 (z score < -2)
- Organic disease WITH 0, 1, or 2 hormone deficiencies AND low IGF-1 (z score < 0)
- Suspected hypothalamic GHD or idiopathic isolated childhood GHD

PERFORM
Stimulation testing (GST, ITT, or macimorelin test)

- High suspicion AND low IGF-1 (z score < 0)
- Low suspicion AND normal IGF-1 (z score ≥ 0)
- Other results

Observe

GHD confirmed

Treat with rhGH

ORDER
IGF-1 measurement with z score at 1- to 2-mo intervals until maintenance dose is achieved

Monitor at 6- to 12-mo intervals

ORDER
IGF-1 measurement with z score AND fasting glucose, hemoglobin A1c, fasting lipid, serum free T4, and cortisol or cosynotropin testing as appropriate

Key
GH Growth hormone
GHD Growth hormone deficiency
GST Glucagon stimulation test
IGF-1 Insulin-like growth factor 1
ITT Insulin tolerance test
rhGH Recombinant human growth hormone

References