WHAT YOU SHOULD KNOW ABOUT

ADULT GROWTH HORMONE DEFICIENCY (AGHD)

AGHD is an underdiagnosed disorder commonly associated with pathology of the hypothalamus or pituitary. Patients with AGHD tend to live with a poor quality of life and often present with other comorbidities.[1]

WHY IS GROWTH HORMONE (GH) IMPORTANT IN ADULTS?

GH is a metabolic hormone that regulates homeostasis of[1]:

PROTEINS **LIPIDS** **CARBOHYDRATES**

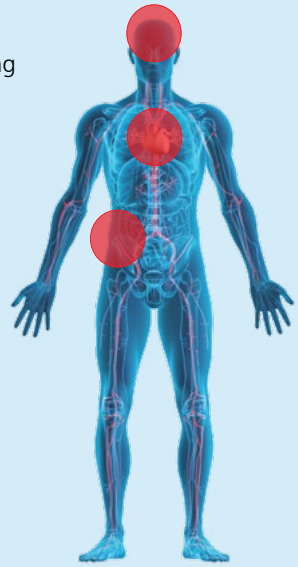
GH is required for regular growth, development, and maintenance of the body and mind.

SYMPTOMS OF AGHD[2-4]

Brain
Decreased psychological well-being
Social isolation
Sexual dysfunction[5]

Muscle
Abnormal heart function
Decreased lean muscle
Reduced muscle strength
Increase in inflammatory markers[6]

Metabolism
Increase in LDL cholesterol
Increased abdominal fat
Decreased bone mineral density
Insulin resistance



AGHD USUALLY GOES UNDIAGNOSED

BECAUSE IT OFTEN REQUIRES TESTING BEYOND PHYSICAL EXAMINATION AND TYPICAL BLOOD WORK.[7,8]

2 TYPES OF AGHD[3,9]

CONGENITAL
People with this form of GHD are born with it
Results from genetic mutations or from structural defects in the brain

ACQUIRED
People with this form of GHD are diagnosed later in life
Results from surgery, trauma, infection, radiation therapy, or tumor growth within the brain

IN THE UNITED STATES,[10]

>50,000
adults have an AGHD diagnosis

≈6000
new cases of AGHD are reported annually

AGHD TYPICALLY RESULTS IN ABNORMALITIES OF[2,11]

- **Body composition**
- **Body fluids**
- **Muscle and bone growth**
- **Mental function**
- **Heart function**

POTENTIAL CAUSES OF AGHD[12]

HYPOTHALAMIC DISEASES

Mass lesions—benign (craniopharyngiomas) and malignant tumors (metastatic from lung, breast, etc.)

Radiation—for CNS and nasopharyngeal malignancies

Infiltrative lesions—sarcoidosis, Langerhans cell histiocytosis

Infections—tuberculous meningitis

Other—traumatic brain injury, stroke

PITUITARY DISEASES

Mass lesions—pituitary adenomas, other benign tumors, cysts

Pituitary surgery

Pituitary radiation

Infiltrative lesions—hypophysitis, hemochromatosis

Infection/abscess

Infarction—Sheehan syndrome

Apoplexy

Genetic mutations

Empty sella syndrome

DIAGNOSING AGHD

Measuring insulin-like growth factor 1 (IGF-1) is a standard assessment of GH function; however, 50% of people with AGHD have IGF-1 levels within the normal reference range. If IGF-1 is within normal range, the most appropriate stimulatory test should be administered to rule out or confirm diagnosis of AGHD.[8,13]

Remind your patients who are experiencing symptoms common with AGHD about the importance of getting tested, and talk to them about the different testing options available.

A SIMPLE TEST CAN HELP CONFIRM DIAGNOSIS OF AGHD.

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