

Pituitary glands

- 1. Which one of the following is acromegaly caused by?**
 - a) Overproduction of gonadotrophin releasing hormone (GnRH)
 - b) Overproduction of vasopressin (antidiuretic hormone)
 - c) Overproduction of growth hormone (GH)
 - d) Overproduction of adrenocorticotrophic hormone (ACTH)

- 2. Which of the following are correct regarding the effects of increased levels of growth hormone in acromegaly?**
 - a) Increased levels of growth hormone stimulate increased production of vasopressin from the liver
 - b) Increased levels of growth hormone stimulate increased production of insulin like growth factor one (IGF1) from the adrenal glands
 - c) Increased levels of growth hormone stimulate increased production of insulin like growth factor one (IGF1) from the liver
 - d) Increased levels of growth hormone stimulate increased production of vasopressin from the adrenal glands

- 3. Which one of the following statements is true regarding the prevalence of acromegaly?**
 - a) Acromegaly affects twice as many men than it does women
 - b) Acromegaly affects twice as many women than men
 - c) Acromegaly effects

- 4. What is the most common cause for the overproduction of growth hormone in acromegaly?**
 - a) Hypothalamic lesion
 - b) Hyperplasia of the pituitary stalk
 - c) Pituitary adenoma
 - d) Pituitary lesion

- 5. Which of the following are signs of acromegaly?**
 - a) Enlargement of hands & fingers
 - b) Decrease in foot size
 - c) Visual field defects e.g. Bi-temporal Heminopia
 - d) Enlargement of feet
 - e) Prominent supraorbital ridge
 - f) Increased jaw prominence
 - g) Enlargement of tongue (macroglossia)
 - h) Oily skin
 - i) Decrease in tongue size (microglossia)
 - j) Crowded teeth

- 6. Which of the following are symptoms of acromegaly?**
 - a) Vomiting
 - b) Widespread rash
 - c) Diarrhoea
 - d) Increased finger ring size
 - e) Headache
 - f) Excessive sweating (hyperhidrosis)
 - g) Visual changes (double vision, reduced vision, tunnel vision)
 - h) Abdominal distention
 - i) Deepening voice
 - j) Paresthesia and weakness in the hands

7. Which age group does acromegaly most commonly affect?

- a) 55-70 years
- b) 10-25 years
- c) 30-50 years
- d) 25-40 years

8. Which of the following investigations is the gold standard for diagnosing acromegaly?

- a) Serum IGF1 measurement
- b) Growth hormone measurement
- c) Growth hormone releasing hormone measurement
- d) Oral glucose tolerance test + Growth hormone measurement

9. Which of the following physiologic functions is *not* regulated by anterior pituitary hormones?

- a) Growth
- b) Thyroid function
- c) Sleep
- d) Reproduction

10. Which of the following clinical characteristics is common to acromegalic patients?

- a) Diarrhea
- b) Alopecia
- c) Weight loss
- d) Increased ring size

11. The preferred initial treatment option for a patient recently diagnosed with acromegaly is

- a) bromocriptine
- b) octreotide
- c) transsphenoidal surgery
- d) radiation therapy

12. KL is a 48-year-old woman who was diagnosed recently with acromegaly. Her past medical history is significant for type 2 diabetes, obesity, and cholelithiasis. She is currently complaining of fatigue, joint pain, increased sweating, and headaches. Which of the following treatments is the most appropriate first-line treatment of KL's symptoms?

- a) Bromocriptine
- b) Cabergoline
- c) Octreotide
- d) Octreotide LAR

13. Which of the following information is most important to provide to an acromegalic patient with a new prescription for octreotide?

- a) Concomitant therapy with ursodeoxycholic acid is needed to prevent gallstones.
- b) The most common adverse effect of octreotide therapy is headache.
- c) A standard multiple vitamin is recommended during therapy
- d) Gastrointestinal adverse effects should subside within 10 to 14 days of therapy

14. Which of the following clinical characteristics is common to patients with growth hormone-deficient short stature?

- a) Normal growth hormone serum concentrations
- b) Physical height less than 2 standard deviations below the population mean
- c) Malnutrition
- d) None of the above

15. Which of the following assessments are needed to diagnose growth hormone deficiency?

- a) Bone age and growth velocity
- b) Bone age, growth velocity, and growth hormone response to provocative stimuli
- c) Sex hormone priming and growth hormone response to provocative stimuli
- d) Growth hormone response to provocative stimuli

16. For which of the following conditions does recombinant human growth hormone therapy have a definitive role?

- a) Normal-variant short stature
- b) Growth hormone-deficient short stature
- c) Natural aging
- d) None of the above

17. Which of the following parameters should be monitored in a patient receiving recombinant human growth hormone therapy?

- a) Alkaline phosphatase
- b) Blood glucose
- c) Thyroid function
- d) All of the above
- e) Which of the following clinical characteristics is common in women with hyperprolactinemia?
- f) Menstrual irregularities
- g) Darkened skin
- h) Dry mouth
- i) Increased blood glucose

18. Which of the following classes of medications is most likely to cause drug-induced hyperprolactinemia?

Beta-blockers

Antidepressants

Antihistamines

Oral contraceptives

19. LJ is a 29-year-old woman who has been diagnosed with a prolactin-secreting adenoma that is 8 mm in diameter. She complains of amenorrhea for 1 year and galactorrhea from both breasts. Which of the following treatments is most appropriate for first-line treatment of LJ's symptoms?:

- a) Radiation therapy
- b) Transsphenoidal surgery
- c) Dopamine agonist therapy
- d) Somatostatin analogue therapy

20. Which of the following dopamine agonists would be an appropriate choice for a noncompliant patient?

Cabergoline

Pergolide

Bromocriptine

All of the above

21. CM is a 30-year-old woman diagnosed with hyperprolactinemia. She recently began therapy with cabergoline. Which of the following medications should be considered as adjunctive therapy for CM?

Human growth hormone

Oral contraceptives

Multivitamins

Antacids

22. Which of the following treatments may be required for patients with panhypopituitarism?

Thyroid replacement

Recombinant human growth hormone

Glucocorticoids

All of the above