性早熟 (Precocious Puberty) 處理流程-男性

Patient with PRECOCIOUS PUBERTY (MALE)

History → Consider:
Physical examination
Bone age
Thyroid function tests

Identify:
Premature adrenarche
McCune-Albright syndrome
Untreated hypothyroidism

Measure 17-OHP, adrenal androgens, FSH, LH, testosterone
Consider:
Gn-RH testing

Prepubertal FSH/LH

Prepubertal testosterone

17-OHP/adrenal androgens

Normal
ACTH test
Normal
Idiopathic precocity
Premature adrenarche

Abnormal
Dexamethasone Suppression Test (High-Dose)

Nonsuppressed
Consider:
Ultrasoundography
CT scan or MRI of abdomen
Angiography

Viniizing adrenal tumor
ACTH-producing tumor

Suppressed
CAH
Cushing's disease
Adrenal rests (testes)

Testicular ultrasonography
Consider:
Biopsy

Idiopathc precocity
Tumor
Neurofibroma
Hamartoma
Trauma
Postinfectious
Structural abnormality
(e.g., Septo-optic dysplasia)

Pubertal FSH/LH
Cranial MRI

Normal results
Abnormal results
性早熟 (Precocious Puberty) 處理流程-女性

Patient with PRECOCIOUS PUBERTY (FEMALE)

History

Physical examination

Exclude:
- Premature thelarche
- Premature adrenarche
- McCune-Albright syndrome
- Untreated hypothyroidism

Assess pattern of precocious development

Isosexual changes

Exclude:
- Birth control pill ingestion

Measure:
- FSH
- LH
- Estradiol

Consider:
- Gn-RH testing

Pubertal levels

Exclude:
- CNS disorder
- Meningitis
- Head trauma

Consider:
- MRI

Abnormal results
- Neurofibroma
- Hamartoma
- Hemorrhage
- Malignancy
- Trauma

Normal results
- Idiopathic precocity

Abnormal results
- McCune-Albright syndrome

Prepubertal levels

Elevated testosterone

Normal results

Elevated androgens

Abdominal pelvic ultrasonography

Measure:
- Serum androgens (androstenedione, DHEA)
- 17-Hydroxyprogesterone
- Testosterone

Measure:
- Sexual function tests
- Endocrinology consultation
- Abdominal-pelvic ultrasonography

Consider:
- Bone age

Follow suspect premature adrenarche

Suppress: Dexamethasone Suppression Test (High-Dose)

Suppression
- Congenital adrenal hyperplasia
- Cushing's disease

No suppression
- Rule out: Adrenal tumor

Ultrasonography
- Surgical consultation to rule out adrenal tumor