

## STANDARD NURSE PROTOCOL FOR AMENORRHEA (PRIMARY AND SECONDARY)

### DEFINITION

Primary amenorrhea is defined as no menstrual period by age 14, in the absence of growth or development of secondary sexual characteristics, or no menstrual period by age 16, regardless of the presence of normal growth and development with the appearance of secondary sexual characteristics.

Secondary amenorrhea is defined as absence of menstrual periods for a length of time equivalent to a total of at least three of the previous cycle intervals or six-twelve months of amenorrhea in a woman who normally experiences irregular menses.

### ETIOLOGY

Primary:

1. Gonadal failure.
2. Congenital absence of uterus and vagina.
3. Constitutional delay.

Secondary:

1. Pregnancy; breastfeeding.
2. Pituitary disease or tumor; disruption of hypothalamic- pituitary axis.
3. Menopause.
4. Too little body fat (about 22% required for menses).
5. Excessive exercise (e.g., long-distance running, ballet dancing, gymnastics, figure skating, etc.).
6. Rapid weight loss.
7. Cessation of menstruation following use of OCs or medroxyprogesterone acetate.
8. Recent change in lifestyle (e.g., increased stress).
9. Thyroid disease.
10. Polycystic ovary disease.
11. Anorexia nervosa or other eating disorders.
12. Premature ovarian failure, ovarian dysgenesis, infection, hemorrhage, necrosis, neoplasm.
13. Asherman's Syndrome.
14. Cervical stenosis.
15. Medications including psychotropics.
16. Chronic illness.
17. Tuberculosis.

### SUBJECTIVE

1. Patient reports absence of menses (as defined above).
2. History may include:

- a. Changes in skin/hair, vision/hearing or voice.
- b. Palpitations.
- c. Breast size changes or galactorrhea.
- d. Vasomotor Symptoms.
- e. Changes in weight, dietary habits.
- f. Cold or heat intolerance.
- g. Known medical problems.
- h. Stress.
- i. Exercise patterns (changes or rigorous).

**OBJECTIVE**

- 1. May be obese or underweight for height.
- 2. May note on physical examination:
  - a. Skin/hair changes – dry skin or warm, moist skin, excessive sweating, palmar erythema, acne, hirsutism, purple abdominal striae, absence of pubic or axillary hair.
  - b. Facial plethora, moon facies, exophthalmos, ocular signs, visual fields defect, impaired auditory acuity, abnormal thyroid size and consistency, fine silky scalp hair or alopecia pattern.
  - c. Tachycardia.
  - d. Breast tissue atrophy, galactorrhea.
  - e. "Buffalo" hump of back.
  - f. On pelvic exam:
    - 1) External – Vulvar atrophy, clitoromegaly.
    - 2) Internal – Atrophic vaginal mucosa, change in cervical mucous or imperforate hymen.
    - 3) Bimanual – Softening of cervix or cervical uterine junction, cervical stenosis, uterine or ovarian atrophy or enlargement.

**ASSESSMENT**

Primary amenorrhea.  
**OR**  
Secondary amenorrhea with or without galactorrhea.

**PLAN**

**DIAGNOSTIC STUDIES**

- 1. Pregnancy test.
- 2. For secondary amenorrhea only:
  - a. Amenorrhea with galactorrhea, and not breastfeeding:  
Draw **fasting** prolactin level(s) prior to breast exam or 1 week after exam and no nipple stimulation for 1 week.
  - b. Thyroid-stimulating hormone (TSH) test (for underlying hypothyroidism).

## THERAPEUTIC

### PHARMACOLOGIC

Amenorrhea without galactorrhea and negative pregnancy test –  
Progestin challenge.

Medroxyprogesterone 5-10 mg 1 tab PO daily for 5-10 days.

1. If bleeding occurs with progestin challenge test (usually within 2-7 days)  
**AND**
  - a. Patient desires contraception and OCs do not pose an unacceptable health risk, begin any FDA approved 35 mcg or less OC.  
**OR**
  - b. Patient does not desire contraception, give medroxyprogesterone acetate, 10 mg PO daily, for the first 10 days of every month, for 3 consecutive months.
  
2. If no bleeding occurs with progestin challenge test, repeat pregnancy test.

### PATIENT EDUCATION/COUNSELING

1. Give menstrual calendar and counsel on its use.
2. Inform that bleeding usually occurs within 2 weeks after treatment (frequently 2-7 days).
3. Discuss what can be expected during future evaluation. Explain that accurate diagnosis may take time.
4. Review female anatomy and menstrual cycle to help her understand the testing being done.
5. Discuss contraception, as indicated.
6. Explain that post-pill amenorrhea or resumption of normal menses may take up to 6 months.

## FOLLOW-UP

Return in two weeks if no withdrawal bleeding has occurred after medroxyprogesterone acetate or no withdrawal bleeding with OCs.

## CONSULTATION/REFERRAL

1. If patient has primary amenorrhea.
2. Positive pregnancy test.
3. Amenorrhea with galactorrhea and abnormal test results.
4. If patient does not have a withdrawal bleed after progestin challenge.
5. Patient fails to have spontaneous menses within 3 months after treatment.
6. Suspected eating disorders, or polycystic ovarian syndrome.
7. If patient has abnormal laboratory test(s).

## REFERENCES

1. American Society of Health-System Pharmacists, *American Hospital Formulary Service*, Bethesda, MD, 2009, **pp. 3305-3311**.
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3. Joellen Hawkins, et al., *Protocols for Nurse Practitioners in Gynecological Settings*, **9th ed.**, Springer Publishing Co., New York, 2007.
4. Leon Speroff and Marc Fritz, *Gynecologic Endocrinology and Infertility*, 7th ed., Lippincott, Williams and Wilkins, Philadelphia, PA, 2005. **(Current)**
5. [http://media.pfizer.com/files/products/uspi\\_provera.pdf](http://media.pfizer.com/files/products/uspi_provera.pdf)