### Secondary Amenorrhea

#### DEFINITION
Amenorrhea (absence of menses) can be a transient, intermittent, or permanent condition resulting from dysfunction of the hypothalamus, pituitary, ovaries, uterus, or vagina. It is often classified as either primary (absence of menarche by age 15 years or thereafter) or secondary (absence of menses for more than three months in girls or women who previously had regular menstrual cycles or six months in girls or women who had irregular menses. Secondary amenorrhea is also defined as the absence of any spotting or bleeding for a period of 3 months in those women who had previously been regular cycling. Delayed menses is used as the diagnosis before then. A patient with infrequent menses technically should not be diagnosed as having secondary amenorrhea until bleeding was missed for 2 times the expected normal menstrual cycle length. Medical causes of secondary amenorrhea may include PCOS, hypothalamic dysfunction, pituitary disease, ovarian or uterine disorders, endocrinopathies, pregnancy, normal and expected side effects of hormonal contraception (particularly hormonal injections, hormonal IUD and hormonal implants), and side effects of various medications. If the underlying problem causes unopposed estrogen, the woman needs protection from endometrial cancer. If the woman’s problem causes hypoestrogenism, the woman needs protection from osteoporosis and other menopause-related symptoms. If the problem causes unwanted infertility, that also must be addressed.

#### SUBJECTIVE
May include as indicated:
1. LMP/menstrual history
2. History negative for symptoms of pregnancy
3. History negative for natural or surgical menopause
4. Documentation of current birth control method
5. Prior hormonal contraceptive use
6. Weight changes: significant weight loss or gain
7. Recent life stressors
8. Recent dilation & curettage (D&C), or uterine ablation
9. Thyroid, adrenal, or ovarian disorders
10. Current medication and/or drug use
11. Strenuous physical activity
12. Eating disorder
13. Galactorrhea or recent breast feeding.
14. Vasomotor symptoms

#### OBJECTIVE
May include:
1. Complete list of all classes of medications (prescription, over-the-counter, and street recreational drugs)
2. Physical and/or pelvic exam, with notation Tanner staging of pubic hair and acanthosis nigricans
3. Breast exam; nipple discharge (galactorrhea)
4. Thyroid examination
5. Signs of androgen excess (i.e., hirsutism, clitoromegaly, acne, oily skin)
6. Signs of estrogen deficiency, vaginal atrophy (i.e., dry and smooth vagina with lack of normal rugae, dry endocervix without mucous)
7. Cervical stenosis or cervical scarring
8. Wt. variances from IBW/BMI charts (see HM Body Mass Index Variances Protocol)
9. Signs of hypothalamic/pituitary disease: headaches, visual field defects, fatigue, polydipsia

#### LABORATORY
May include as indicated:
1. Negative sensitive urine pregnancy test
Other lab tests (i.e., TSH, FSH, Prolactin, hemoglobin A1C, 17-alpha hydroxyprogesterone and total testosterone level) as indicated

**ASSESSMENT**

Client with secondary amenorrhea

**PLAN**

1. Treatment options will depend on medical history, contraceptive history, desire for pregnancy, peri-menopausal status, and BMI.
2. After evaluation may offer contraception as desired to provide monthly bleeds or prevent bleeding if no pregnancy is desired. May consider combined contraception, continuous contraception or progestin only if client meets MEC. (See hormonal method protocols)
3. Consider hormone assays, Hormone Replacement therapy, or combined contraceptive method if patient is having peri-menopausal symptoms.
4. Consider progestin challenge of MPA (Provera) 5-10 mg oral x 10 days monthly OR as needed for cycles > 35 days if no contraception is needed. Aygestin 5 mg daily for 10 days may be used in place of MPA.
5. Evaluate for eating disorder and athletic triad as needed.
6. Advise adequate Calcium supplements 1200 mg and Vitamin D 800 IU daily if at risk for osteoporosis.
7. For long established history of < 8 menses/year consider referral for Pituitary axis testing as needed (TSH, Prolactin, DHEA-S, hormone levels, or diabetic testing).

**CLIENT EDUCATION**

1. Review client treatment and discuss causes of amenorrhea, risks of endometrial hyperplasia, and osteoporosis.
2. Discuss future plans for contraception/conception and possible need for future medical intervention.
3. Encourage client to strive for a healthy balance between work, recreation, rest, & dietary intake.
4. Discuss further testing and/or follow up as per MD consult
5. Recommend client RTC/PRN as appropriate per plan

**CONSULT/ REFER TO PHYSICIAN**

1. Any client presenting with primary amenorrhea
2. Any client who is pregnant refer for appropriate care
3. Any client needing further testing based on client's individual needs (i.e., Provera Challenge, hormone assay, EMB, PCOS labs)
4. Any client with secondary amenorrhea greater than 1-year duration who is not on hormonal contraception
5. Any client with diagnosed or suspected eating disorder

**References:**

2. The Healthy Female Athlete | ACOG