بسمه تعالى

بیمار خانم ۳۰ ساله G2P2ABOL2 با شکایت اختلال سیکل ماهیانه به درمانگاه مراجعه کرده است.هر دو زایمان طبیعی بوده است.خونریزیهای پریود حجیم شده است.بین سیکلهای قاعدگی لکه بینی ندارد.طول مدت پریودها کاهش یافته است و از ۲۸ به ۱۸ روز در ماه تغییر پیدا کرده است.جوش صورت یا موهای زاید ندارد.در ۲ سال اخیر مراجعه به مراکز سلامت جامع و یا متخصص زنان نداشته است.سابقه مصرف داروی خاصی نمی دهد.سابقه بستری یا جراحی هم ندارد.

در معاینه ملتحمه PALE می باشد.سمع قلب و ریه نرمال است.شکم نرم است و تندرنس ندارد.

در معاینات واژینال زخم سرویکس ندارد.ترشحات عفونی ندارد.از بیمار پاپ اسمیر گرفته شد.

W=60,L=160,BMI=23.43

- Lab test:
- Cbc wbc=8,000 , hb=11,mcv=78,ferritin=10,tsh=2.5

سونوگرافي:

ضخامت اندومتر 8 میلی متر و دارای پولیپ 10 میلی متری می باشد.

Problem list

-اختلالات قاعدگی بصورت کاهش سیکل از 28 به 18 روز

-افزایش حجم خونریری در هر پریود

-کم خونی

-عدم مراقبت سالیانه در مراکز جامع سلامت یا متخصص زنان

Abnormal uterine bleeding in nonpregnant reproductiveage patients: Terminology, evaluation, and approach to diagnosis

استاد راهنما: سرکار خانم دکتر فاضل متخصص زنان زایمان-عضو هیأت علمی دانشگاه ارایه دهنده: دکتر اسمی دستیار سال اول یزشکی خانواده

INTRODUCTION

uterine bleeding of abnormal quantity, duration, or schedule a common gynecologic concern

DEFINITIONS

Abnormalities in frequency

Frequent

Infrequent

Absent

Irregular bleeding

18 to 25 years: cycle length variance >9 days

- 26 to 41 years: cycle length variance >7 days
- 42 to 45 years: cycle length variance >9 days

Prolonged menstrual bleeding

Abnormalities in volume – HEAVY OR LIGHT

- Intermenstrual bleeding
- Cyclical midcycle intermenstrual bleeding
- Acyclical intermenstrual bleeding

ETIOLOGY

(polyp, adenomyosis, leiomyoma, malignancy and hyperplasia, coagulopathy, ovulatory dysfunction, endometrial, iatrogenic, and not yet classified)

INITIAL EVALUATION OF ALL PATIENTS

Assess hemodynamic stability

History

- Gynecologic and obstetric history
- Recent or current pregnancy
- Menstrual history and bleeding pattern
- Sexual history
- History of obstetric or gynecologic surgery

Contraceptive history

Risk factors for endometrial cancer

Medical history

Medications

Bleeding disorders

Endocrine disorders

Other

Physical examination

Potential sites of bleeding

Current uterine bleeding

Size and contour of the uterus

Presence of an adnexal mass or tenderness

Pregnancy test

SECONDARY EVALUATION

Based on bleeding pattern

Heavy menstrual bleeding

Imaging-(Uterine fibroids-Adenomyosis-Endometrial polyps -Uterine arteriovenous malformation)

Laboratory tests

Endometrial sampling

Intermenstrual bleeding

IMAGING -Endometrial polyps-Cesarean scar defect

Endometrial sampling

Laboratory tests

Irregular bleeding

Laboratory tests

Thyroid function tests-Prolactin level-Androgen levels-Follicle-stimulating hormone (FSH) or luteinizing hormone (LH) -Estrogen levels

Endometrial sampling

Imaging

Amenorrhea

Decreased volume

Regular menses with increased frequency

Based on risk factors for endometrial cancer

Age 45 years to menopause

Age < 45 years

SPECIAL CONSIDERATIONS

Endometrial sampling: Choice of modality

Imaging: Choice of modality

Pelvic ultrasound-intracavitary pathology(saline infusion sonohysterography or hysteroscopy.)

Saline infusion sonography (SIS)

Hysteroscopy

Other-MRI-CT

WHEN TO REFER

heavy bleeding, severe anemia, persistent bleeding despite treatment, if there is suspicion of malignancy, surgery is required.

SUMMARY AND RECOMMENDATIONS

Definitions and etiology

Initial evaluation of all patients

SECONDARY evaluation

HMB

Intermenstrual bleeding

Irregular bleeding

Indications for endometrial sampling

Causes of iatrogenic bleeding

Imaging

Evaluation and differential diagnosis of abnormal uterine bleeding (AUB) in nonpregnant reproductive-age women

		ı		1
Bleeding	Other	Differentia	l diagnosis	
pattern	associated clinical features	Common etiologies	Less common etiologies	Evaluation
Regular menses that are heavy or prolonged	Enlarged uterus on examination, discrete masses may be noted	Uterine leiomyoma		- Pelvic ultrasound - Saline infusion sonography or hysteroscopy (if intracavitary pathology is suspected)
	- Dysmenorrhea - Enlarged, boggy uterus on examination	Adenomyosis		Pelvic ultrasound
	- Family history of bleeding disorder - Symptoms of bleeding diathesis - Anticoagulant therapy	Bleeding disorder		Testing for bleeding disorder
	Risk factors for uterine malignancy		Endometrial carcinoma or uterine sarcoma	Endometrial sampling
Regular menses with intermenstrual bleeding		Endometrial polyp		- Pelvic ultrasound - Saline infusion sonography or hysteroscopy (if available)
	Risk factors for uterine malignancy		Endometrial carcinoma or uterine sarcoma	Endometrial sampling

	Recent history of uterine or cervical procedure or childbirth, particularly if infection was present		Chronic endometritis	Endometrial sampling
Irregular bleeding, may be more or		Ovulatory dysfunction:		
less frequent than normal menses and volume and duration may vary	Hirsutism, acne, and/or obesity	PCOS		Total testosterone and/or other androgens (may not be increased in all women with PCOS)
	Galactorrhea	Hyperprolactinemia		Prolactin
	 Recent weight gain or loss Heat or cold intolerance Family history of thyroid dysfunction 	Thyroid disease		Thyroid function tests
	Risk factors for uterine malignancy		Endometrial carcinoma or uterine sarcoma	Endometrial sampling
Secondary amenorrhea	History of irregular bleeding	Ovulatory dysfunction		Refer to ovulatory dysfunction above
	Poor nutrition or intense exercise	Hypothalamic amenorrhea		- Follicle- stimulating hormone - Luteinizing hormone - Estradiol
	Hot flushes	Premature ovarian insufficiency		Follicle-stimulating hormone
	Recent history of uterine or cervical		Cervical stenosis	On pelvic examination,

Causes of abnormal genital tract bleeding in females

Genital tract disorders	Trauma	
Uterus	Sexual intercourse	
Benign conditions:	Sexual abuse	
Endometrial polyps	Foreign bodies (including intrauterine device)	
Endometrial hyperplasia	Pelvic trauma (eg, motor vehicle accident)	
Adenomyosis	Straddle injuries	
Leiomyomas (fibroids)	Cesarean scar defect (prior cesarean delivery)	
Arteriovenous malformation (also referred to as enhanced myometrial vascularity)	Drugs	
Cancer:	Contraception:	
Endometrial adenocarcinoma	Hormonal contraceptives	
Sarcoma	Intrauterine devices	
Infection:	Postmenopausal hormone therapy	
Pelvic inflammatory disease	Anticoagulants	
Endometritis	Tamoxifen	
Ovulatory dysfunction	Corticosteroids	
Cervix	Chemotherapy	
	Phenytoin	
Benign conditions:	Antipsychotic drugs	
Cervical polyps Ectropion	Antibiotics (eg, due to toxic epidermal necrolysis or Stevens-Johnson syndrome)	
Endometriosis	Systemic disease	
Cancer:	Diseases involving the vulva:	
Invasive carcinoma	Crohn disease	
Metastatic (uterus, choriocarcinoma)		
Infection:	Behçet syndrome	
Cervicitis	Pemphigoid	
Vulva	Pemphigus	
	Erosive lichen planus	

	1.1
Benign conditions:	
Skin tags	В
Sebaceous cysts	
Condylomata	
Angiokeratoma	
Cancer	
Vagina	
Benign conditions:	Т
Gartner duct cysts	P
Polyps	C
Adenosis (aberrant glandular tissue)	Н
Cancer	R
Vaginitis/infection:	E
Bacterial vaginosis	S
Sexually transmitted infections	E
Atrophic vaginitis	Dise
Upper genital tract disease	U
Pelvic inflammatory disease	В
Fallopian tube cancer	υ
Ovarian cancer	C
regnancy complications	It
	_H

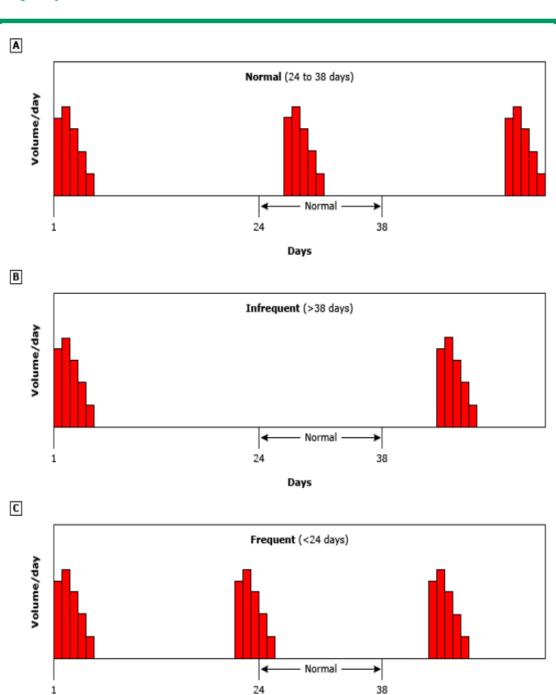
Benign conditions:	Lymphoma
Skin tags	Bleeding disorders:
Sebaceous cysts	von Willebrand disease
Condylomata	Thrombocytopenia or platelet dysfunction
Angiokeratoma	Acute leukemia
Cancer	Some coagulation factor deficiencies
Vagina	Advanced liver disease
Benign conditions:	Thyroid disease
Gartner duct cysts	Polycystic ovary syndrome
Polyps	Cushing syndrome
Adenosis (aberrant glandular tissue)	Hormone-secreting adrenal and ovarian tumors
Cancer	Renal disease
Vaginitis/infection:	Emotional or physical stress
Bacterial vaginosis	Smoking
Sexually transmitted infections	Excessive exercise
Atrophic vaginitis	Diseases not affecting the genital tract
Upper genital tract disease	Urethritis
Pelvic inflammatory disease	Bladder cancer
Fallopian tube cancer	Urinary tract infection
Ovarian cancer	Colorectal cancer
Pregnancy complications	Inflammatory bowel disease
	Hemorrhoids
	Other

Endometriosis

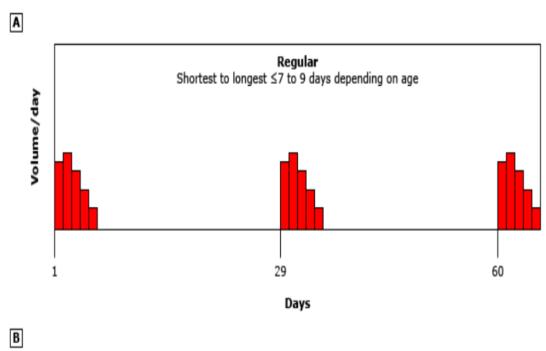
Normal menstruation parameters

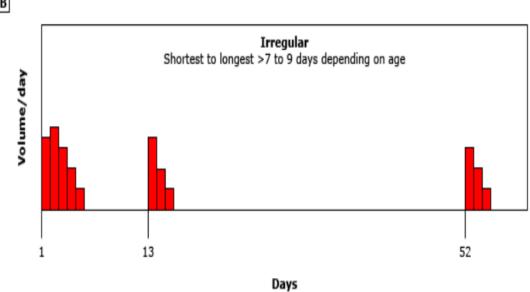
Parameter	Normal	Abnormal
Frequency	≥ 24 and ≤ 38 days	Absent (no bleeding): amenorrhea
		Frequent (<24 days)
		Infrequent (>38 days)
Duration	≤8 days	Prolonged (>8 days)
Regularity	Regular: shortest to longest cycle variation: ≤7 to 9 days*	Irregular: shortest to longest cycle variation: ≥10 days
Flow volume (patient determined)	Patient considers normal	Patient considers light
		Patient considers heavy
Intermenstrual bleeding (bleeding between cyclically regular onset of menses)	None	Random Cyclic (predictable): Early cycle Mid cycle Late cycle
Unscheduled bleeding on progestin ± estrogen gonadal steroids (contraceptive pills, rings, patches, IUDs, or injections)	Not applicable for patients not on gonadal steroid medication None (for patients on gonadal steroid medication)	Present

Frequency of menses

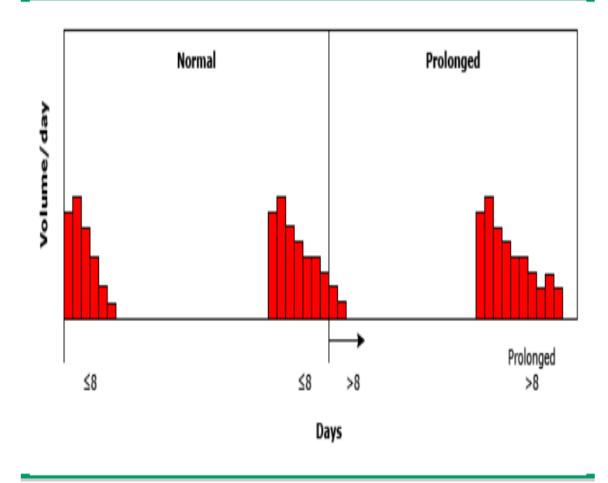


Regularity of menses



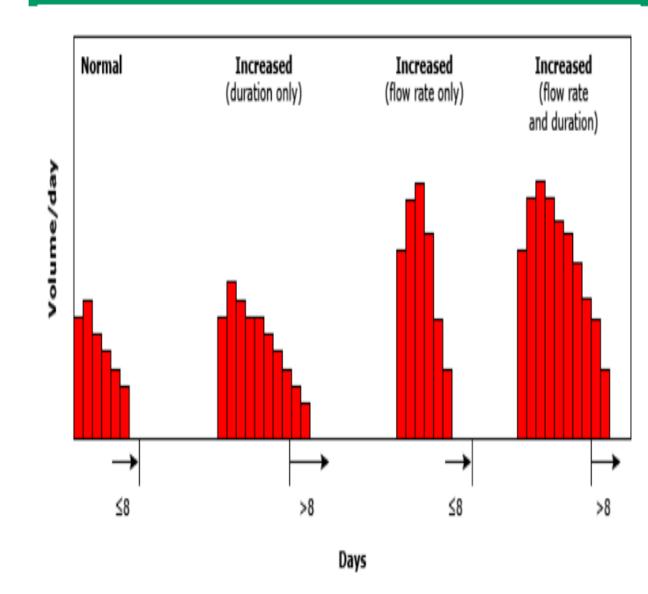


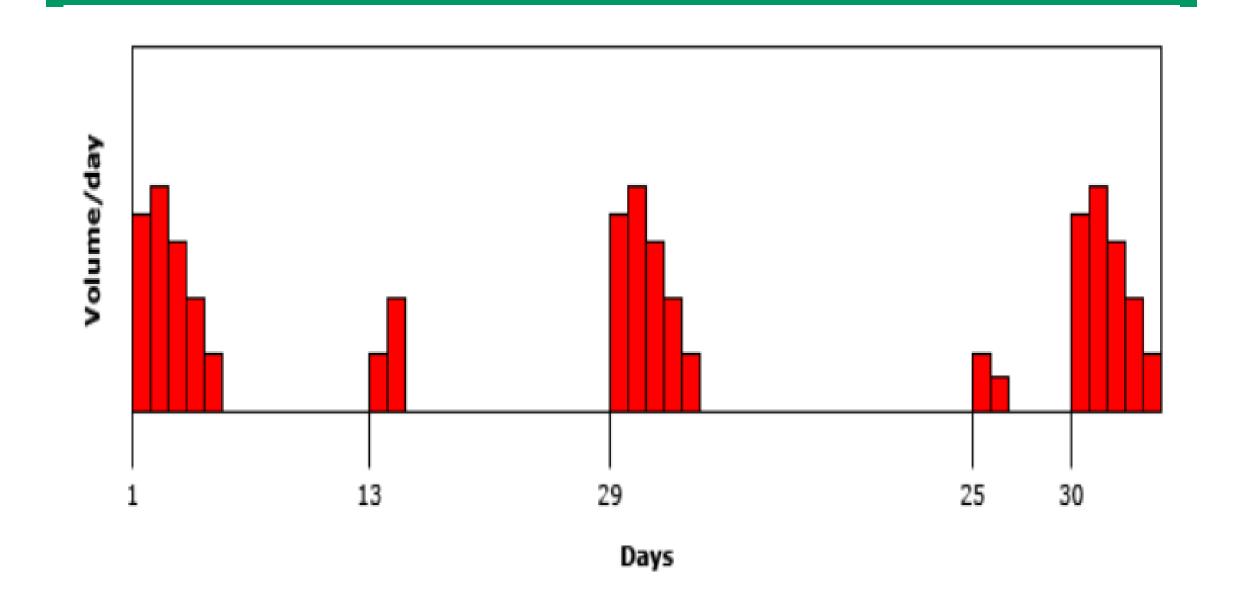
Duration of menses



The panel above demonstrates the two definitions of duration of menses. When a menstrual period is present and lasts up to 8 days, it is considered "normal." If it is in excess of 8 days, regardless of volume, as depicted in the center and right cluster, it is deemed "prolonged."

Volume of menses





Uterine bleeding patterns

Bleeding pattern	Definition
Bleeding	 Any bloody vaginal discharge that requires the use of such protection as pads or tampons
Spotting	 Any bloody vaginal discharge that is not large enough to require sanitary protection
Bleeding/spotting episode	 One or more consecutive days on which bleeding or spotting has been entered on the diary card
Bleeding/spotting-free interval	 One or more consecutive days on which no bleeding or spotting has been entered on the diary card
Bleeding/spotting segment	 One bleeding/spotting episode and the immediately following bleeding/spotting-free interval
Reference period	■ The number of consecutive days upon which the analysis is based (usually taken as 90 days for women using long-acting hormonal systems, and 28 or 30 days for women using once-a-month systems, including combined oral contraception)
Different types of analysis, which can be undertaken on bleeding patterns within a reference period	 Number of bleeding/spotting days Number of bleeding/spotting episodes Mean, range of lengths of bleeding/spotting episodes (or medians and centiles for box-whisker plot analysis) Mean, range (medians and centiles) of lengths of bleeding/spotting-free intervals Number of spotting days and spotting-only episodes

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Causes of intermenstrual bleeding

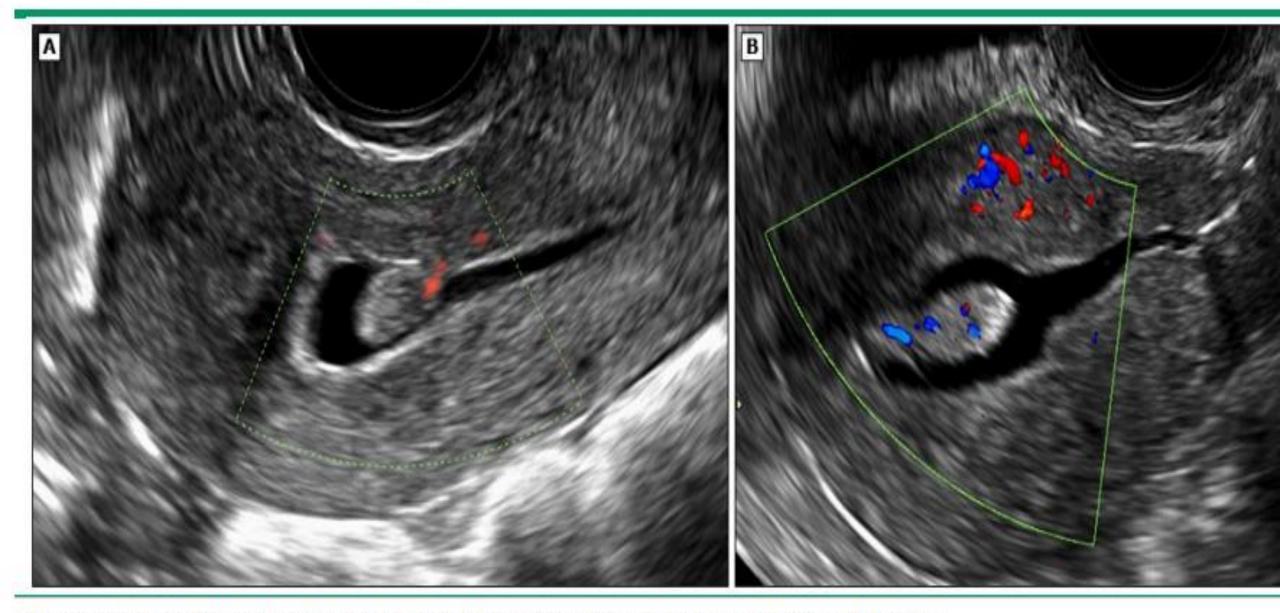
Drugs
Oral contraceptives
Infection
Cervicitis*
Endometritis
Sexually transmitted ulcerations*
Vaginitis
Benign growths
Cervical polyps*
Endometrial polyps
Ectropion*
Uterine fibroids
Vulvar skin tags, sebaceous cysts, condylomata
Vaginal Gartner's duct cysts, polyps, adenosis
Cancer
Uterine
Cervical*
Vaginal
Vulvar
Rarely ovarian or fallopian tube
Trauma
Previous cesarean delivery (ie, cesarean scar defect)

^{*} Often cause postcoital bleeding.

Risk factors for endometrial cancer

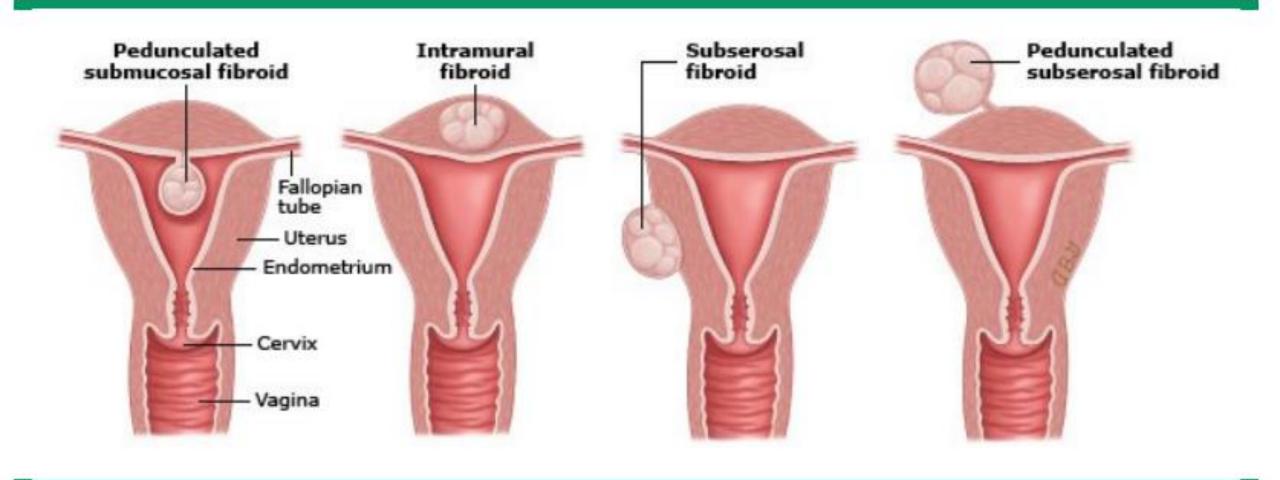
Risk factor	Relative risk (RR) (other statistics are noted when used)
Increasing age	1 to 2% cumulative incidence of endometrial cancer in females age 50 to 70 years
Unopposed estrogen therapy	2 to 10
Tamoxifen therapy	2
Early menarche	NA
Late menopause (after age 55)	2
Nulliparity	2
Polycystic ovary syndrome (chronic anovulation)	3
Obesity	For type I endometrial cancer: OR 1.5 for overweight (BMI 25.0 to $<30~\mathrm{kg/m^2}$), 2.5 for class 1 obesity (30.0 to $<35~\mathrm{kg/m^2}$), 4.5 for class 2 obesity (35.0 to 39.9 kg/m²), and 7.1 for class 3 obesity ($\ge 40.0~\mathrm{kg/m^2}$). For type II: OR 1.2 for overweight (BMI 25.0 to $<30~\mathrm{kg/m^2}$), 1.7 for class 1 obesity (30.0 to $<35~\mathrm{kg/m^2}$), 2.2 for class 2 obesity (35.0 to 39.9 kg/m²), and 3.1 for class 3 obesity ($\ge 40.0~\mathrm{kg/m^2}$).
Diabetes mellitus	2
Estrogen-secreting tumor	NA
Lynch syndrome (hereditary nonpolyposis colorectal cancer)	13 to 71% lifetime risk
Cowden syndrome	13 to 28% lifetime risk
Family history of endometrial, ovarian, breast, or colon cancer	NA

Sonohysterogram of endometrial polyp



Sonohysterograms of two patients, both with an endometrial polyp; Doppler shows flow to the polyp via feeding vessels in both patients.

Fibroid locations in the uterus



These figures depict the various types and locations of fibroids. An individual may have one or more types of fibroids.

Causes of heavy or prolonged menses

Coagulopathy	Structural lesion
von Willebrand disease	Uterine leiomyomas (fibroids)
Thrombocytopenia (due to idiopathic	Adenomyosis
thrombocytopenic purpura, hypersplenism, chronic renal failure)	Endometrial polyps
Acute leukemia	Other
Anticoagulants	Endometritis
Advanced liver disease	Hypothyroidism
Neoplasm	Intrauterine device
Endometrial hyperplasia or carcinoma	Hyperestrogenism
Uterine sarcoma	Endometriosis

Causes of ovulatory dysfunction

rir	nary hypothalamic-pituitary dysfunction
I	mmaturity at onset of menarche or perimenopausal decline
I	ntense exercise
E	Eating disorders
S	Stress
I	diopathic hypogonadotropic hypogonadism
F	Hyperprolactinemia
I	actational amenorrhea
F	Pituitary adenoma or other pituitary tumors
F	Kallman syndrome
7	Cumors, trauma, or radiation of the hypothalamic or pituitary area
S	Sheehan's syndrome
E	Empty sella syndrome
I	ymphocytic hypophysitis (autoimmune diseases)
Oth	er disorders
F	Polycystic ovary syndrome
F	Hyperthyroidism or hypothyroidism
F	Hormone-producing tumors (adrenal, ovarian)
(Chronic liver or renal disease
(Cushing's disease
(Congenital adrenal hyperplasia
	Premature ovarian failure, which may be autoimmune, genetic, surgical idiopathic, or related to drugs of adiation
7	Turner syndrome
A	Androgen insensitivity syndrome
Лес	lications

Primordial Prevention

Primary Prevention

Secondary Prevention

Tertiary Prevention

Quaternary Prevention

Primordial Prevention

- ۱- اقدام در خصوص ترویج سبک زندگی سالم
- ۲- آموزش در خصوص تشکیل پرونده الکترونیک سلامت جهت تمامی آحاد جمعیت کشور و ارزش و اهمیت انجام مراقبتهای لازم در هر گروه سنی
 - ۳- آموزش های لازم در سطح ملی برای آشنایی با علایم بیماری ریسک فاکتورها
- ۴-برگزاری جلسات هماهنگی در سطح کابینه دولت و وزارت بهداشت جهت تامین شرایط لازم برای سلامت بانوان

Primary Prevention

۱- انجام مراقبتهای دوره ای در هرگروه سنی حسب مورد

۲- شناسایی افراد پر خطر و در معرض ریسک جهت توصیه های لازم بهداشتی در خصوص کنترل وزن انجام فعالیت بدنی و سبک زندگی سالم و ترک سیگار و الکل درمان بیماریهای همراهی که امکان و ریسک ایجاد موارد مثبت را میکند

۳- آموزش سبک زندگی سالم و افزایش فعالیت بدنی حداقل ۳۰ دقیقه در روز

۴-دعوت از خانمهای سنین باروری به مراکز جامع سلامت جهت معاینات دوره ای و انجام غربالگریها

Secondary Prevention

1- بیماریابی بموقع در جمعیت در معرض ریسک و انجام اقدامات تستهای بیمار یابی و تشخیصی

۲- غربالگری کوموربیدتی های زمینه ای

Tertiary Prevention

- 1- درمان بموقع و مقتضى براساس آخرين و جديدترين مطالعات
 - 2- درمان کوموربیدیتی های همراه واقدامات پیشگیرانه جهت کنترل بیماری
 - 3-مراقبت و مونیتورینگ بموقع بیماران

Quaternary Prevention

- 1- مونیتورینگ و فالواپ بموقع بیماران و ارایه خدمات درمانی مقتضی
- 2- عدم انجام اقدامات پاراکلینیکی و دارویی که تاثیر خاصی بر پیش آگهی و عوارض بیماری ندارد