Acute Heavy Menstrual Bleeding Clinical Pathway

Emergency and Hospitalist Care

Disclaimer

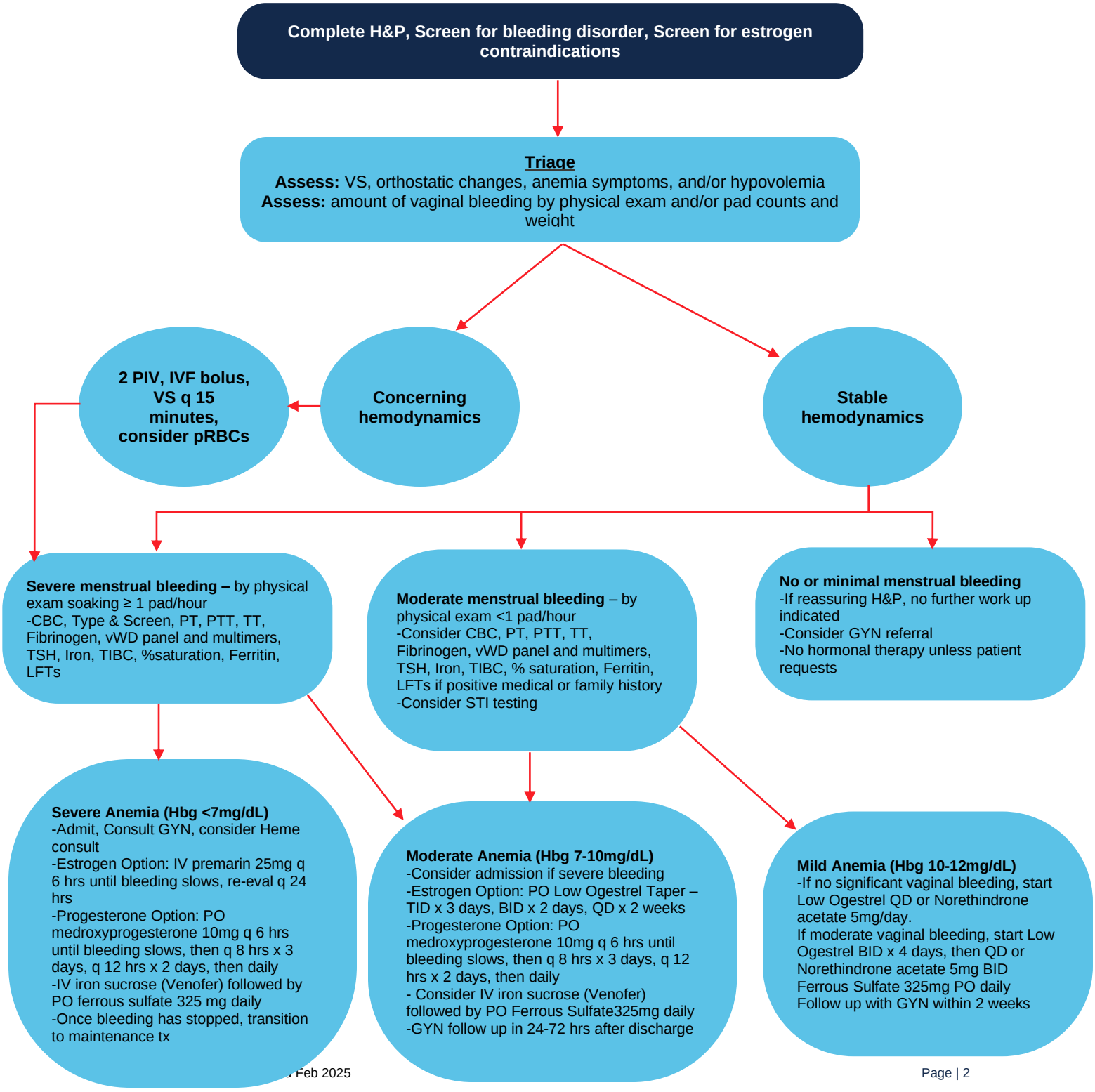
This clinical pathway is intended to provide general guidance and should not replace clinical judgment. It is meant to assist licensed practitioners and other health care providers in clinical decision-making by describing a range of generally acceptable approaches to the diagnosis and management of a particular condition. A particular patient's circumstances should always be taken into account when a practitioner is deciding on a course of management.This clinical pathway is current as of the date of publication and will be reviewed periodically to align with any updated best practices or evidence; however, new development may notbe represented in the published version. The treating practitioner assumes all risks associated with care decisions. Phoenix Children's accepts no liability for the content of this clinical pathway or the outcomes a patient might experience where a practitioner consulted the content of this clinical pathway.

Table of Contents

Pathway Flow Diagram/Algorithm

Flow diagram for the initial management of acute heavy menstrual bleeding. These guidelines are for those patients who present with active and on-going menstrual bleeding.

Initial care of acute heavy menstrual bleeding



Scope

Definition – Abnormal uterine bleeding/heavy menstrual bleeding (AUB/HMB) is defined as excessive menstrual or inter-menstrual bleeding that adversely interferes with physical, emotional, social, and material quality of life and is not associated with pregnancy.[1]

Inclusion Criteria

- Current menstrual or intermenstrual bleeding that is ≥80mL/cycle, soaking a pad or tampon more than every 1-2 hours or requiring double protection (eg. Pad and tampon simultaneously), frequent soling of clothing or bed linens, passage of clots (larger than a quarter), flooding episodes (sensation of gush of blood flowing out/overflowing through products), or subjective impression that flow is heavier than normal.[1,2]
- With or without associated anemia

Exclusion Criteria – Pregnancy

Pathway Goals

- Provide care in the correct setting – Outpatient vs Inpatient management
- For patients presenting to the emergency department:
  - Provide a consistent, evidence-based diagnostic and therapeutic approach
  - Decrease unnecessary hospitalizations
- For patients hospitalized:
  - Provide a consistent, evidence-based diagnostic and therapeutic approach
  - Optimize their length of stay
  - Optimize the amount of blood products required
  - Standardized patient and family education
  - Reduce 90-day readmission

Key Clinical Recommendations with Evidence Based Supporting Material

Epidemiology: A population-based study of 1000 healthy female adolescents found that 40% reported experiencing heavy menstrual bleeding.[1] Furthermore, among adolescents with heavy menstrual bleeding, 20%-40% are known to have an underlying bleeding disorder.[1-3] The most common bleeding disorder is von Willebrand disease, followed by platelet function defects, thrombocytopenia, and clotting factor deficiencies.[1] Heavy menstrual bleeding may be the sole complaint in adolescent females with an underlying bleeding disorder.[2]

Etiology: The most common etiology of heavy menstrual bleeding in adolescent females is anovulatory bleeding secondary to immaturity of the hypothalamic-pituitary-ovarian axis.[1,2] Other important causes in this population include pregnancy, infection, bleeding disorder, polycystic ovarian syndrome (PCOS), and medications (hormonal therapy, anticoagulant).[1,4,5]

Significance: Menstrual cycles are an indicator of overall adolescent health. However, many patients and their families as well as providers are unaware of the characteristics of a normal menstrual cycle.[1] While there are limited studies exploring the impact of heavy menstrual bleeding on adolescent's quality of life, adult women are known to incur significant medical costs through outpatient visit, hospital admissions, and emergency room visits.[1]

Differential Diagnosis:

- Endocrine
  - Anovulatory bleeding – the **most common** cause in adolescent females due to immaturity of the hypothalamic-pituitary-ovarian axis
  - Polycystic Ovarian Syndrome (PCOS)
  - Thyroid disease
  - Ovarian cyst

- Bleeding Disorder[1]
  - Von Willebrand's disease (5%-36%)– the most common bleeding disorder associated with HMB
  - Platelet function defects (2%-44%)
  - Thrombocytopenia (13%-20%)
  - Clotting factor deficiencies (8%-9%)
- Pregnancy
  - Spontaneous abortion
  - Ectopic pregnancy
  - Gestational trophoblastic disease
- Infection
  - Cervicitis
  - Pelvic inflammatory disease (PID)
- Uterine – structural causes are rare in the adolescent population
  - Leiomyoma (fibroid)
  - Polyp
  - Malignancy
- Medications
  - Intrauterine device (Mirena, Kyleena, Paragard IUDs) or Subdermal Implant (Nexplanon)
  - Medroxyprogesterone Acetate (Depo-Provera)
  - Oral contraceptive pills/patch/rings
  - Anticoagulants
- Other
  - Trauma
  - Foreign body

Evaluation:

- Focused History
  - Menstrual history – age of menarche, menstrual cycle length, number of bleeding days, frequency of changing pads or tampons and saturation of each pad or tampon at time of change, nighttime changes of menstrual products, use of maxi pads/super tampons, leaking/soaking through menstrual products.
  - Symptoms of anemia – headache, dizziness, lightheadedness, palpitations, fatigue, pica
  - Associated symptoms – fevers, chills, vaginal discharge, abdominal/pelvic pain, changes in bowel or bladder habits, trauma
  - Sexual history – sexual activity, use of contraceptives, sexually transmitted diseases, pregnancy history
  - Past medical history
  - Medications
  - Family history (including family history of thrombophilia)
- Screen for underlying bleeding disorder – ISTH Bleeding Assessment Tool (https://practical-haemostasis.com/Clinical%20Prediction%20Scores/Formulae%20code%20and%20formulae/Formulae/Bleeding-Risk-Assessment-Score/ISTH_BAT_score.html)
  - Prolonged bleeding from trivial wounds >10 minutes
  - Heavy, prolonged, or recurrent bleeding after surgery or dental procedures
  - Easy bruising with minimal trauma
  - Nose bleeds lasting >10 minutes or requiring medical attention 1-2 times per month
  - Unexplained gastrointestinal bleeding
  - Anemia requiring iron therapy or transfusion
  - Heavy menstrual bleeding
  - History of joint, muscle, CNS bleeds
  - Family history of bleeding disorders
- Screen for contraindications to estrogen-containing hormonal therapy – U.S. Medical Eligibility Criteria, 2024 (https://www.cdc.gov/contraception/media/pdfs/2024/07/us-mec-summary-chart-color-508.pdf)
  - Family history of thrombophilia, stroke/DVT/MI prior to age 50

- Personal history of migraine headaches with aura and/or DVT
- Physical Examination
  - Vital signs including temperature, blood pressure, pulse, orthostatic vital signs, weight, and BMI
  - **Pad weights and counts for accurate estimated blood loss**
  - Neck – thyroid assessment
  - Skin – pallor, bruising, petechiae, hirsutism, acanthosis nigricans, acne
  - Abdomen – striae, palpable mass, tenderness, hepatomegaly
  - GU – inspection of the vulva, vagina, urethra, and anus to determine the source of the bleeding, presence of trauma, malignancy, and Tanner staging. **A speculum and bimanual examination may not be feasible in patients who are not sexually active. If a speculum and bimanual examination is determined to be necessary (e.g. inspection for trauma-related injury or suspected abuse) discuss with the patient what they feel comfortable with. Gynecology can be consulted for an examination under anesthesia.**
- Laboratory Evaluation
  - Urine pregnancy test
  - Complete Blood Count
  - Comprehensive Metabolic Panel
  - Additional labs to obtain if moderate to severe vaginal bleeding present or personal/family history concerning for an underlying bleeding disorder.
    - Activated Partial Thromboplastin Time (aPTT)
    - Prothrombin Time (PT)
    - Thrombin Time
    - Fibrinogen
    - Iron Panel: serum Iron, TIBC, % saturation, ferritin
    - Von Willebrand Panel (Factor 8 assay, von Willebrand factor activity, von Willebrand factor antigen) and von Willebrand factor multimers
- Imaging – **Not typically indicated**. If you suspect structural abnormalities or your physical examination is limited, consider transabdominal pelvic ultrasonography.
- Consult Gynecology when severe menstrual bleeding and anemia (Hbg <10mg/dl) are present

Medication Recommendations

i. Management of severe menstrual bleeding (≥1 pad or tampon/hour) with severe anemia (<7mg/dL)

ii. Initial management

iii. Estrogen option (preferred, check for contraindications) – 25mg IV every 6 hours until bleeding slows or stops, then transition to maintenance. Re-evaluate every 24 hours for improvement.

iv. Progesterone option – medroxyprogesterone acetate 10mg PO every 6 hours until bleeding slows or stops. Then taper down to every 8 hours for 3 days, every 12 hours for 2 days, then daily until seen with GYN as an outpatient.

v. IV iron sucrose (Venofer) - dose is 2.5-7 mg/kg (max dose is 300mg) over 90 minutes. Dose can be repeated every 3-4 days if patient continues to be admitted. If patient is discharged, send home on PO ferrous sulphate 325 mg (elemental iron-65mg) once daily for a three month course. PO iron is best absorbed with vitamin C rich foods and absorption is inhibited by dairy/milk, antacids, tea/coffee

vi. Consider ondansetron 4mg PO or IV every 8 hours PRN

vii. Maintenance

viii. Transition off IV premarin by starting a long-term hormonal option of the patient's choice.

ix. Oral contraceptive pill – Low Ogestrel BID x 4 days then daily after that

x. Non-contraceptive pill - Norethindrone acetate 5mg BID x 4 days then daily after that

xi. Depo-Provera 150mg IM every 3 months

xii. Management of severe menstrual bleeding (≥1 pad or tampon/hour) with moderate anemia (7-10mg/dL)

xiii. Estrogen option – Low Ogestrel TID for 3 days, BID for 2 days, then daily after that

xiv. Progesterone option – Medroxyprogesterone acetate PO 10mg every 8 hours until bleedig slows or stops, then every 12 hours for 2 days, then daily

xv. Consider IV iron sucrose (Venofer) - dose is 2.5-7 mg/kg (max dose is 300mg) over 90 minutes. Dose can be repeated every 3-4 days if patient continues to be admitted. If patient is discharged, send home on PO ferrous sulphate 325 mg (elemental iron-65mg) once daily for a three month course. PO iron is best absorbed with vitamin C rich foods and absorption is inhibited by dairy/milk, antacids, tea/coffee

xvi. Consider zofran 4mg PO every 8 hours PRN

xvii. Management of moderate menstrual bleeding (<1 pad or tampon/hour) with moderate anemia (7-10mg/dL)

xviii. Estrogen option – Low Ogestrel TID for 3 days, BID for 2 days, then daily after that

xix. Progesterone option – Medroxyprogesterone acetate PO 10mg every 8 hours until bleedig slows or stops, then every 12 hours for 2 days, then daily

xx. Consider IV iron sucrose (Venofer) - dose is 2.5-7 mg/kg (max dose is 300mg) over 90 minutes. Dose can be repeated every 3-4 days if patient continues to be admitted. If patient is discharged, send home on PO ferrous sulphate 325 mg (elemental iron-65mg) once daily for a three month course. PO iron is best absorbed with vitamin C rich foods and absorption is inhibited by dairy/milk, antacids, tea/coffee

xxi. Consider zofran 4mg PO every 8 hours PRN

xxii. Management of moderate menstrual bleeding with mild anemia (10-12mg/dL)

xxiii. Estrogen option – Low Ogestrel BID x 4 days, then daily after that

xxiv. Progesterone Option – Norethindrone acetate 5mg BID

xxv. Ferrous sulfate 325mg (elemental iron-65mg) once daily. PO iron is best absorbed with vitamin C rich foods and absorption is inhibited by dairy/milk, antacids, tea/coffee

xxvi. Management of mild menstrual bleeding

xxvii. No hormonal therapy unless requested by patient/family

xxviii. Contraindications to estrogen containing hormonal therapy

xxix. Personal history of thrombophilia, DVT/Stroke/MI, migraine headaches with aura

xxx. Family history of thrombophilia or DVT prior to age 50

xxxi. See Medical Eligibility Criteria for additional contraindications (https://www.cdc.gov/contraception/media/pdfs/2024/07/us-mec-summary-chart-color-508.pdf)

xxxii. Key side effects

xxxiii. Estrogen can cause nausea. Consider ondansetron for nausea as needed.

xxxiv. Iron can cause constipation. Consider colace for constipation as needed.

Admission Criteria

- Ongoing moderate to severe blood loss defined as completely saturating 1 or more pads/tampons fully every 1-2 hours during evaluation
- Persistent vital sign abnormalities
- Hbg <7mg/dL
- Consideration for admission when Hbg <9mg/dL and psychosocial concerns present

Discharge Criteria

- Normal vital signs and/or no anemia
- Mild to moderate anemia (defined at >7mg/dL) with normal vital signs

Patient and Family Education/Discharge Planning

- Patients with mild vaginal bleeding should follow up with Gynecology within 2-4 weeks
- Patients with moderate vaginal bleeding with normal VS and no evidence of current acute blood loss started on hormonal therapy should follow up with Gynecology and Hematology as clinically indicated within 1-2 weeks.
- Patients with severe vaginal bleeding and/or severe anemia should follow up with Gynecology for Hbg POC and medication adherence check within 1-2 weeks. At that time, it can be determined if follow up in Menorrhagia Clinic (Multi-disciplinary Clinic with Gynecology and Hematology) is indicated.
- Iron supplementation of 325 (elemental iron-65mg) once daily should be prescribed for all patients with evidence of anemia. Consider recommending a stool softener, such as Colace, in addition.
- If prescribing a hormonal taper, following the taper patients should continue maintenance therapy of one pill daily of Low Ogestrel or Medroxyprogeterone Acetate 10mg.
- Recommend anti-emetics for any patient receiving combined oral contraceptive (Low Ogestrel) more than once per day.

References

1. Haamid F, Sass AE, Dietrich JE. Heavy menstrual bleeding in adolescents. J Pediatr Adolesc Gynecol. 2017;30:335-340.
2. Zia A, Jain S, Kouides P, et al. Bleeding disorders in adolescents with heavy menstrual bleeding in a multicenter prospective US cohort. *Haematologica.* 2020;105(7):1969-1976.
3. Seravalli V, Linari S, Peruzzi E, Dei M, Paladino E, Bruni V. Prevalence of hemostatic disorders in adolescents with abnormal uterine bleeding. *J Pediatr Adolesc Gynecol.* 2013;26(5):285-289.
4. James AH, Kouides PA, Abdul-Kadir R, Dietrich JE, Edlund M, Federici AB, Halimeh S, Willem Kamphuisen P, Lee CA, Matinez-Perez O, McLintock C, Peyvandi F, Philipp C, Wilkinson J, Winikoff R. Evaluation and management of acute menorrhagia in women with and without underlying bleeding disorders: Consensus statement from an international expert panel. Eur J Obstet Gynecol Reprod Biol. 2011;158(2):124-134.
5. American College of Obstetricians and Gynecologists. Committee Opinion No. 557: Management of acute abnormal uterine bleeding in nonpregnant reproductive-aged women. Obstet Gynecol. 2013;121:891-896.

Pathway Champions

Melissa Parks, DO, MPH, Department of Pediatric and Adolescent Gynecology, Amy Williamson, MD, Department of Pediatric and Adolescent Gynecology, Natasha Bala, MD, Department of Hematology. For questions or updates needed for the pathway, please reach out to Melissa Parks.

Clinical Effectiveness Committee Approval – 12/2019, Updated/Reapproved 2/20/2025

Phoenix Children's

Appendix A – OCP Eligibility

For accessible version, please see the summary of classifications at https://www.cdc.gov/contraception/hcp/usmec/

Summary Chart of U.S. Medical Eligibility Criteria for Contraceptive Use (U.S. MEC)

Updated in 2024. This summary sheet only contains a subset of the recommendations from the U.S. MEC. For complete guidance, see: https://www.cdc.gov/contraception/hcp/usmec/. Most contraceptive methods do not protect against STIs. Consistent and correct use of the external (male) latex condom reduces the risk of STIs and HIV.
Please see NIH guidelines for up to date recommendations on hormonal contraception and ARVs: https://clinicalinfo.hiv.gov/en/guidelines/perinatal/prepregnancy-counseling-childbearing-age-overview?view=full#table-3 and https://clinicalinfo.hiv.gov/en/guidelines/hiv-clinical-guidelines-adult-and-adolescent-arv/drug-interactions-overview?view=full.

KEY: 1 = No restriction (method can be used) | 2 = Advantages generally outweigh theoretical or proven risks | 3 = Theoretical or proven risks usually outweigh the advantages | 4 = Unacceptable health risk (method not to be used)

Condition	Sub-Condition	Cu-IUD I	Cu-IUD C	LNG-IUD I	LNG-IUD C	Implant I	Implant C	DMPA I	DMPA C	POP I	POP C	CHC I	CHC C
Age		Menarche to <20 yrs: **2**		Menarche to <20 yrs: **2**		Menarche to <18 yrs: **1**		Menarche to <18 yrs: **2**		Menarche to <18 yrs: **1**		Menarche to <40 yrs: **1**	
		≥20 yrs: **1**		≥20 yrs: **1**		18–45 yrs: **1**		18–45 yrs: **1**		18–45 yrs: **1**		≥40 yrs: **2**	
						>45 yrs: **1**		>45 yrs: **2**		>45 yrs: **1**			
Anatomical abnormalities	a. Distorted uterine cavity	**4**		**4**									
	b. Other abnormalities	**2**		**2**									
Anemia, iron-deficiency		**2**		**1**		**1**		**1**		**1**		**1**	
Benign ovarian tumors	(*including cysts*)	**1**		**1**		**1**		**1**		**1**		**1**	
Breast disease	a. Undiagnosed mass	**1**		**2***		**2***		**2***		**2***		**2***	
	b. Benign breast disease	**1**		**1**		**1**		**1**		**1**		**1**	
	c. Family history of cancer	**1**		**1**		**1**		**1**		**1**		**1**	
	d. Breast cancer‡												
	i. Current	**1**		**4**		**4**		**4**		**4**		**4**	
	ii. Past and no evidence of current disease for 5 years	**1**		**3**		**3**		**3**		**3**		**3**	
Breastfeeding	a. <21 days postpartum					**2***		**2***		**2***		**4***	
	b. 21 to <30 days postpartum												
	i. With other risk factors for VTE					**2***		**2***		**2***		**3***	
	ii. Without other risk factors for VTE					**2***		**2***		**2***		**3***	
	c. 30–42 days postpartum												
	i. With other risk factors for VTE					**1***		**2***		**1***		**3***	
	ii. Without other risk factors for VTE					**1***		**1***		**1***		**2***	
	d. >42 days postpartum					**1***		**1***		**1***		**2***	
Cervical cancer	Awaiting treatment	**4**	**2**	**4**	**2**	**2**		**2**		**1**		**2**	
Cervical ectropion		**1**		**1**		**1**		**1**		**1**		**1**	
Cervical intraepithelial neoplasia		**1**		**2**		**2**		**2**		**1**		**2**	
Chronic kidney disease†	a. Current nephrotic syndrome	**1**	**1**	**2**	**2**	**2**		**3**		**2/4***		**4**	
	b. Hemodialysis	**1**	**1**	**2**	**2**	**2**		**3**		**2/4***		**4**	
	c. Peritoneal dialysis	**2**	**1**	**2**	**2**	**2**		**3**		**2/4***		**4**	
Cirrhosis	a. Compensated (*normal liver function*)	**1**		**1**		**1**		**1**		**1**		**1**	
	b. Decompensated† (*impaired liver function*)	**1**		**2**		**2**		**3**		**2**		**4**	
Cystic fibrosis‡		**1***		**1***		**1***		**2***		**1***		**1***	
Deep venous thrombosis (DVT)/Pulmonary embolism (PE)†	a. Current or history of DVT/PVE, receiving anticoagulant therapy (*therapeutic dose*)	**2***		**2***		**2***		**2***		**2***		**3***	
	b. History of DVT/PE, receiving anticoagulant therapy (*prophylactic dose*)												
	i. Higher risk for recurrent DVT/PE	**2***		**2***		**2***		**3***		**2***		**4***	
	ii. Lower risk for recurrent DVT/PE	**2***		**2***		**2***		**2***		**2***		**3***	
	c. History of DVT/PE, not receiving anticoagulant therapy												
	i. Higher risk for recurrent DVT/PE	**1**		**2**		**2**		**3**		**2**		**4**	
	ii. Lower risk for recurrent DVT/PE	**1**		**2**		**2**		**2**		**2**		**3**	
	d. Family history (*first-degree relatives*)	**1**		**1**		**1**		**1**		**1**		**2**	
Depressive disorders		**1***		**1***		**1***		**1***		**1***		**1***	

Condition	Sub-Condition	Cu-IUD I	Cu-IUD C	LNG-IUD I	LNG-IUD C	Implant I	Implant C	DMPA I	DMPA C	POP I	POP C	CHC I	CHC C
Diabetes	a. History of gestational disease	**1**		**1**		**1**		**1**		**1**		**1**	
	b. Nonvascular disease												
	i. Non-insulin dependent	**1**		**2**		**2**		**2**		**2**		**2**	
	ii. Insulin dependent‡	**1**		**2**		**2**		**2**		**2**		**2**	
	c. Nephropathy, retinopathy, or neuropathy‡	**1**		**2**		**2**		**3**		**2**		**3/4***	
	d. Other vascular disease or diabetes of >20 years' duration‡	**1**		**2**		**2**		**3**		**2**		**3/4***	
Dysmenorrhea	Severe	**2**		**1**		**1**		**1**		**1**		**1**	
Endometrial cancer‡		**4**	**2**	**4**	**2**	**1**		**1**		**1**		**1**	
Endometrial hyperplasia		**1**		**1**		**1**		**1**		**1**		**1**	
Endometriosis		**2**		**1**		**1**		**1**		**1**		**1**	
Epilepsy‡	(*see also Drug Interactions*)	**1**		**1**		**1***		**1***		**1***		**1***	
Gallbladder disease	a. Asymptomatic	**1**		**2**		**2**		**2**		**2**		**2**	
	b. Symptomatic												
	i. Current	**1**		**2**		**2**		**2**		**2**		**3**	
	ii. Treated by cholecystectomy	**1**		**2**		**2**		**2**		**2**		**2**	
	iii. Medically treated	**1**		**2**		**2**		**2**		**2**		**3**	
Gestational trophoblastic disease (GTD)‡	a. Suspected GTD (*immediate postevacuation*)												
	i. Uterine size first trimester	**1***		**1***		**1***		**1***		**1***		**1***	
	ii. Uterine size second trimester	**2***		**2***		**1***		**1***		**1***		**1***	
	b. Confirmed GTD												
	i. Undetectable or non-pregnant β-hCG levels	**1***	**1***	**1***	**1***	**1***		**1***		**1***		**1***	
	ii. Decreasing ß-hCG levels	**2***	**1***	**2***	**1***	**1***		**1***		**1***		**1***	
	iii. Persistently elevated ß-hCG levels or malignant disease, with no evidence or suspicion of intrauterine disease	**2***	**1***	**2***	**1***	**1***		**1***		**1***		**1***	
	iv. Persistently elevated ß-hCG levels or malignant disease, with evidence or suspicion of intrauterine disease	**4***	**2***	**4***	**2***	**1***		**1***		**1***		**1***	
Headaches	a. Nonmigraine (*mild or severe*)	**1**		**1**		**1**		**1**		**1**		**1***	
	b. Migraine												
	i. Without aura (*includes menstrual migraine*)	**1**		**1**		**1**		**1**		**1**		**2***	
	ii. With aura	**1**		**1**		**1**		**1**		**1**		**4***	
History of bariatric surgery‡	a. Restrictive procedures	**1**		**1**		**1**		**1**		**1**		**1**	
	b. Malabsorptive procedures	**1**		**1**		**1**		**1**		**3**		**COCs: 3** **P/R: 1**	
History of cholestasis	a. Pregnancy related	**1**		**1**		**1**		**1**		**1**		**2**	
	b. Past COC related	**1**		**2**		**2**		**2**		**2**		**3**	
History of high blood pressure during pregnancy		**1**		**1**		**1**		**1**		**1**		**2**	
History of pelvic surgery	(*see also Postpartum [including cesarean delivery]*)	**1**		**1**		**1**		**1**		**1**		**1**	
HIV	a. High risk for HIV	**1***	**1***	**1***	**1***	**1**		**1**		**1**		**1**	
	b. HIV infection					**1***		**1***		**1***		**1***	
	i. Clinically well receiving ARV therapy	**1**	**1**	**1**	**1**	*If on ARV, see also Drug Interactions.*							
	ii. Not clinically well or not receiving ARV therapy†	**2**	**1**	**2**	**1**	*If on ARV, see also Drug Interactions.*							

US_UKMEC_2024

Abbreviations: ARV = antiretroviral; C = continuation of contraceptive method; CHC = combined hormonal contraceptive (pill, patch, and ring); COC = combined oral contraceptive; Cu-IUD = copper intrauterine device; DMPA = depot medroxyprogesterone acetate; I = initiation of contraceptive method; LNG-IUD = levonorgestrel intrauterine device; NA = not applicable; POP = progestin-only pill; P/R = patch/ring; SSRI = selective serotonin reuptake inhibitor; STI = sexually transmitted infection; VTE = venous thromboembolism. †Condition associated with increased risk as a result of pregnancy. *Please see the complete guidance for a clarification to this classification: https://www.cdc.gov/contraception/hcp/usmec/.

Summary Chart of U.S. Medical Eligibility Criteria for Contraceptive Use (U.S. MEC)

Condition	Sub-Condition	Cu-IUD		LNG-IUD		Implant		DMPA		POP		CHC	
		I	C	I	C	I	C	I	C	I	C	I	C
Hypertension	a. Adequately controlled hypertension	1*		1*		1*		2*		1*		3*	
	b. Elevated blood pressure levels (properly taken measurements)												
	i. Systolic 140-159 or diastolic 90-99	1*		1*		1*		2*		1*		3*	
	ii. Systolic ≥160 or diastolic ≥100[†]	1*		2*		2*		3*		2*		4*	
	c. Vascular disease	1*		2*		2*		3*		2*		4*	
Inflammatory bowel disease	(ulcerative colitis or Crohn's disease)	1		1		1		2		2		2/3*	
Ischemic heart disease[‡]	Current and history of	1		2	3	2	3	3		2	3	4	
Liver tumors	a. Benign												
	i. Focal nodular hyperplasia	1		2		2		2		2		2	
	ii. Hepatocellular adenoma[‡]	1		2		2		3		2		4	
	b. Malignant[§] (hepatocellular carcinoma)	1		3		3		3		3		4	
Malaria		1		1		1		1		1		1	
Multiple risk factors for atherosclerotic cardiovascular disease	(e.g., older age, smoking, diabetes, hypertension, low HDL, high LDL, or high triglyceride levels)	1		2		2*		3*		2*		3/4*	
Multiple sclerosis	a. Without prolonged immobility	1		1		1		2		1		1	
	b. With prolonged immobility	1		1		1		2		1		3	
Obesity	a. Body mass index (BMI) ≥30 kg/m²	1		1		1		1		1		2*	
	b. Menarche to <18 years and BMI ≥30 kg/m²	1		1		1		2		1		2*	
Ovarian cancer[‡]		1		1		1		1		1		1	
Parity	a. Nulliparous	2		2		1		1		1		1	
	b. Parous	1		1		1		1		1		1	
Past ectopic pregnancy		1		1		1		1		2		1	
Pelvic inflammatory disease	a. Current	4	2*	4	2*	1		1		1		1	
	b. Past												
	i. With subsequent pregnancy	1	1	1	1	1		1		1		1	
	ii. Without subsequent pregnancy	2	2	2	2	1		1		1		1	
Peripartum cardiomyopathy[‡]	a. Normal or mildly impaired cardiac function												
	i. <6 months	2		2		1		2		1		4	
	ii. ≥6 months	2		2		1		2		1		3	
	b. Moderately or severely impaired cardiac function	2		2		2		3		2		4	
Postabortion (spontaneous or induced)	a. First trimester abortion												
	i. Procedural (surgical)	1*		1*		1*		1*		1*		1*	
	ii. Medication	1*		1*		1*		1/2*		1*		1*	
	iii. Spontaneous abortion with no intervention	1*		1*		1*		1*		1*		1*	
	b. Second trimester abortion												
	i. Procedural (surgical)	2*		2*		1*		1*		1*		1*	
	ii. Medication	2*		2*		1*		1*		1*		1*	
	iii. Spontaneous abortion with no intervention	2*		2*		1*		1*		1*		1*	
	c. Immediate postseptic abortion	4		4		1*		1*		1*		1*	
Postpartum (nonbreastfeeding)	a. <21 days					1		2		1		4	
	b. 21 days to 42 days												
	i. With other risk factors for VTE					1		2		1		3*	
	ii. Without other risk factors for VTE					1		1		1		2	
	c. >42 days					1		1		1		1	
Postpartum (including cesarean delivery, breastfeeding, or nonbreastfeeding)	a. <10 minutes after delivery of the placenta	2*		2*									
	b. 10 minutes after delivery of the placenta to <4 weeks	2*		2*									
	c. ≥4 weeks	1*		1*									
	d. Postpartum sepsis	4		4									
Pregnancy		4*		4*		NA*		NA*		NA*		NA*	

Condition	Sub-Condition	Cu-IUD		LNG-IUD		Implant		DMPA		POP		CHC	
		I	C	I	C	I	C	I	C	I	C	I	C
Rheumatoid arthritis	a. Not on immunosuppressive therapy	1		1		1		2		1		2	
	b. On immunosuppressive therapy	2	1	2	1	1		2/3*		1		2	
Schistosomiasis	a. Uncomplicated	1		1		1		1		1		1	
	b. Fibrosis of the liver[‡] (if severe, see also Cirrhosis)	1		1		1		1		1		1	
Sexually transmitted infections (STIs)	a. Current purulent cervicitis or chlamydial infection or gonococcal infection	4	2*	4	2*	1		1		1		1	
	b. Vaginitis (including Trichomonas vaginalis and bacterial vaginosis)	2	2	2	2	1		1		1		1	
	c. Other factors related to STIs	2*	2	2*	2	1		1		1		1	
Sickle cell disease[§]		2		1		1		2/3*		1		4	
Smoking	a. Age <35	1		1		1		1		1		2	
	b. Age ≥35, <15 cigarettes/day	1		1		1		1		1		3	
	c. Age ≥35, ≥15 cigarettes/day	1		1		1		1		1		4	
Solid organ transplantation[‡]	a. No graft failure	1	1	1	1	2		2/3*		2		2*	
	b. Graft failure	2	1	2	1	2		2/3*		2		4	
Stroke[‡]	History of cerebrovascular accident	1		2		2	3	3		2	3	4	
Superficial venous disorders	a. Varicose veins	1		1		1		1		1		1	
	b. Superficial venous thrombosis (acute or history)	1		1		1		2		1		3*	
Surgery	a. Minor surgery without immobilization	1		1		1		1		1		1	
	b. Major surgery												
	i. Without prolonged immobilization	1		1		1		1		1		2	
	ii. With prolonged immobilization	1		1		1		2		1		4	
Systemic lupus erythematosus[‡]	a. Positive (or unknown) antiphospholipid antibodies	1*	1*	2*		2*		3*	3*	2*		4*	
	b. Severe thrombocytopenia	3*	2*	2*		2*		3*	2*	2*		2*	
	c. Immunosuppressive therapy	2*	1*	2*		2*		2*	2*	2*		2*	
	d. None of the above	1*	1*	2*		2*		2*	2*	2*		2*	
Thalassemia		2		1		1		1		1		1	
Thrombophilia[‡]		1*		2*		2*		3*		2*		4*	
Thyroid disorders	Simple goiter, hyperthyroid, or hypothyroid	1		1		1		1		1		1	
Tuberculosis[‡] (see also Drug Interactions)	a. Nonpelvic	1	1	1	1	1*		1*		1*		1*	
	b. Pelvic	4	3	4	3	1*		1*		1*		1*	
Unexplained vaginal bleeding	(suspicious for serious condition) before evaluation	4*	2*	4*	2*	3*		3*		2*		2*	
Uterine fibroids		2		2		1		1		1		1	
Valvular heart disease	a. Uncomplicated	1		1		1		1		1		2	
	b. Complicated[‡]	1		1		1		2		1		4	
Vaginal bleeding patterns	a. Irregular pattern without heavy bleeding	1		1	1	2		2		2		1	
	b. Heavy or prolonged bleeding	2*		1*	2*	2*		2*		2*		1*	
Viral hepatitis	a. Acute or flare	1		1		1		1		1		3/4*	2
	b. Chronic	1		1		1		1		1		1	1
Drug Interactions													
Antiretrovirals (ARVs) used for prevention (PrEP) or treatment of HIV[‡]	Fosamprenavir (FPV)	1/2*	1*	1/2*	1*	2*		2*		2*		3*	
	All other ARVs are 1 or 2 for all methods												
Anticonvulsant therapy	a. Certain anticonvulsants (phenytoin, carbamazepine, barbiturates, primidone, topiramate, oxcarbazepine)	1		1		2*		1*		3*		3*	
	b. Lamotrigine	1		1		1		1		1		3*	
Antimicrobial therapy	a. Broad-spectrum antibiotics	1		1		1		1		1		1	
	b. Antifungals	1		1		1		1		1		1	
	c. Antiparasitics	1		1		1		1		1		1	
	d. Rifampin or rifabutin therapy	1		1		2*		1*		3*		3*	
SSRIs		1		1		1		1		1		1	
St. John's wort		1		1		2		1		2		2	