Provincial Adult Abnormal Uterine Bleeding Primary Care Clinical Pathway

Quick Links: Primer & Expanded details | Provider resources | Patient pathway | Provide feedback

Normal cyclical bleeding refers to a regular bleed occurring at 24-38-day intervals (cycle length may vary)

1. History

- Evaluate bleed (pattern, quantity and non-gynecological sources)
- Pregnancy risk / sexual activity
- Risk factors for gynecological cancers

Patients > 40 years old, with history of amenorrhea > 1 year and new episode of bleeding → Follow Post-Menopausal Bleeding Pathway

2. Assessment

- Vitals / general appearance
- Vulva / vagina/ cervix: Atrophic change, trauma, ulcer or mass
- **Pelvic exam**

Trauma Informed Exam Guide

3. Red flags

- Patient looks unwell
- Tachycardia / hypotension
- Soaking through >1 high protection product consistently per hour (pad/tampon/menstrual cup)
- Fever

Yes

4. Investigations

Pap Test	If abnormal	Manage as per guidelines
STI Screening	If positive	Treat as per guidelines
Pregnancy Test	If positive	Manage pregnancy
CBC/Ferritin	If low	Consider transfusion as per guidelines Follow Iron deficiency anemia pathway

- Endometrial biopsy (if available): >40 years old, or <40 y/o with significant risk factors present
- Transvaginal Ultrasound (If not available/ appropriate complete trans abdominal pelvic ultrasound)

If urgent abnormal results → **6. Urgent Advice or Referral**

5. Manage

Start Medical Management:

Non-Hormonal Options
- NSAIDS
- Tranexemic acid

Hormonal Options
- Progesterone only
- Combined contraceptive

Consider Imaging and Biopsy Results

- Intermenstrual / post-coital bleeding → If cervix friable, treat for mucopurulent cervicitis as per guideline
- Polyp **or** submucosal fibroid **or** large / multiple fibroids **or** concerning findings
- Failed or declined medical management
- If endometrial biopsy was indicated but unable to be completed or insufficient tissue obtained
- Hyperplasia without atypia → Continue/start progesterone treatment. Repeat endometrial sampling in 3-6 months. Reassess and if persistent or reoccurring symptoms refer.
- Hyperplasia with atypia or malignancy → **7. Refer to Gyne-Oncology**

If symptoms persist → **7. Refer to Gynecology** Follow the Provincial Referral Pathway

Alberta Health Services

Call to Action: We need your feedback during this **new** pathway's initial testing phase!

Alberta's Pathway Hub | Background | Patient resources

This primary care pathway was co-developed by primary and specialty care and includes input from multidisciplinary teams from all five zones in Alberta Health Services, the Provincial Pathways Unit, and Patient and Family Advisors. It is intended to be used in conjunction with specialty advice services, when required, to support care within the medical home.

EXPANDED DETAILS

Pathway Primer

- This clinical pathway provides primary care providers with guidance on evidence-based diagnosis, investigations, and management and appropriate referral of abnormal uterine bleeding in post-menarchal adults with a uterus. The Society of Obstetricians and Gynecologists of Canada (SOCG) generally recommend that treatment of AUB should start with medical management, followed by the least invasive surgical interventions to achieve results for patients.[1] This principle is also reiterated in a *Choosing Wisely Canada* recommendation that surgical interventions should be avoided for abnormal uterine bleeding until medical management (including progesterone intra-uterine system) has been offered and either declined or found unsuccessful.[2]
- Normal cyclical menstrual bleeding refers to a regular menses that occurs at an interval of 24-38 days in a pre-menopausal patient.[1] Abnormal uterine bleeding (AUB) is bleeding that occurs outside of the normal 24-38 day pattern. Post-menopausal bleeding is defined as bleeding occurring in a person with uterus who is both older than 40 years of age and has a new onset of bleeding after one year of amenorrhea. See Provincial Post-Menopausal Bleeding Primary Care Clinical Pathway for information on managing this condition.
- Abnormal uterine bleeding is a common condition that affects many people with a uterus, who are of reproductive age and it can result in significant health and economic burdens. For example, a 2007 systematic review on AUB assessed the prevalence of heavy bleeding, one type of AUB, at between 10% to 30% in women of reproductive ages.[3]

1. History

A thorough patient history and physical examination will, in most cases, identify the cause(s) of abnormal uterine bleeding and provide direction for investigation and management. Recognition of diverse gender identities of patients is important. Use pronouns and names appropriate to the patient's gender identity and use gender-inclusive language throughout the interaction.

- **Evaluate the bleeding pattern, including quantity and timing**
  - Do cycles occur between 24-38 days apart? Cycles may vary in length month to month, but a normal cycle will average between 24-38 days in length.
  - Is there bleeding between cycles?
  - Is the amount of bleeding enough to soak a protective product per hour?
  - Is there bleeding with intercourse?
- **Consider differential diagnosis (non-gynecological sources)**
  - Rule out urinary or bowel as the source for bleeding.
  - Assess use of hormonal contraception to determine if lack of adherence may be contributing to bleeding or if there have been recent changes to hormonal contraception prescription regime.
- **Assess pregnancy risk and sexual activity**
  - All pre- or peri-menopausal patients with abnormal bleeding should have a pregnancy test if there is potential for pregnancy.

- For patients older than 40 years with a history of amenorrhea for > 1 year and have a new episode of bleeding, consult the Provincial Post-Menopausal Bleeding Primary Care Clinical Pathway

- **Review the risk factors for gynecological cancers** [1]

  Endometrial Cancer Risk Factors

  The average age for women with endometrial cancer is 61 years, but 5% - 30% of cases can occur in premenopausal women.[1] Women younger than 50 years of age can share many of the same risk factors for endometrial cancer as older women

  - Age > 40 years
  - Obesity (BMI > 30 kg/m2)
  - Nulliparity
  - PCOS (polycystic ovarian syndrome)
  - Irregular cycles
  - Diabetes
  - Lynch syndrome or HNPCC (hereditary non-polyposis colorectal cancer)- the most common hereditary form of colorectal cancer
  - Current tamoxifen use
  - Unopposed estrogen exposure

  Cervical Cancer Risk Factors

  - Suboptimal cervical screening
  - Multiparity
  - HPV Infection
  - Sexual Activity:
    - Becoming sexually active at a young age (especially younger than 18 years old)
    - Multiple sexual partners
    - Having one partner who is considered high risk (someone with HPV infection or who has many sexual partners)
  - Weakened immune system
  - Chlamydia infection
  - Long-term use of oral contraceptives
  - Family history of cervical cancer

  Ovarian Cancer Risk Factors

  - Hereditary
    - Family history of ovarian cancer
    - Personal history of breast cancer
    - Alteration in BRCA1 or BRCA2
    - Lynch Syndrome
  - Reproductive
    - Advanced Age
    - Nulligravity
    - Infertility

- Hormonal
  - Early age at menarche
  - Late age at natural menopause
  - Hormone replacement therapy
  - Estrogen
  - Androgens
- Inflammatory
  - Perineal talc exposure
  - Endometriosis
  - Pelvic inflammatory disease
- Lifestyle
  - Obesity
- Geography
  - Extremes in latitude

2. Assessment

The physical examination should identify evidence of systemic conditions or anatomical causes of bleeding.

- Providing Trauma-Informed Care is critical. Providers are encouraged to refer to the Canadian Public Health Association Guide for providing trauma informed exams.
- **It is highly recommended that patients should receive a pelvic exam, including inspection of external genitalia, speculum and bimanual exams.**
- Examine the external genitalia for ulcers or atrophic tissue, which could be the source of the bleeding.
  - If ulcers are present, initiate an urgent referral to gynecology for biopsy and medical management. A biopsy can be taken by the primary care provider if skilled in this area.
- Inspect and palpate internally for abnormalities such as fibroids, masses or cervical polyps. If concerning lesion or mass present, initiate an urgent referral to gynecology for biopsy and medical management. A biopsy can be taken by the primary care provider if skilled in this area.

3. Red flags

- Patient looks unwell
- Tachycardia/hypotension
- Flooding through >1 high protection product consistently per hour (pad/tampon/menstrual cup)
- Fever

If red flags are present or the patient is medically unstable, call RAAPID for an urgent referral to gynecology for immediate hospital evaluation or call 911.

4. Investigations

- If the patient is due, include a **PAP test** (TOP Cervical Cancer Screening Guideline).
- If there is intermenstrual, post-coital bleeding or vaginal discharge, initiate testing for:
  - Chlamydia
  - Gonorrhea
  - Trichomonas
  - Bacterial Vaginosis
  - Yeast
- If **STI testing is positive**, treat as per provincial guidelines (STI Treatment Guidelines).
- **Rule out and/or manage pregnancy**:
  - Perform a sensitive urine or serum pregnancy test if there is any possibility of pregnancy.
    - If the patient has a positive pregnancy test and is bleeding, ensure the pregnancy is viable and intrauterine with a pelvic ultrasound.
    - If the pregnancy is NOT viable and intrauterine and the patient is stable, link to early pregnancy loss clinic, if available or local hospital. You can search the Alberta Referral Directory to find an early pregnancy loss clinic in your zone.
  - If this is a possible ectopic pregnancy or the patient is bleeding heavily or is medically unstable, call RAAPID for referral to gynecology.
- **CBC/ Ferritin**: For all stable patients, consider ordering a CBC/Ferritin. Treat as appropriate:
  - Follow the Using Blood Wisely Guidelines when considering a transfusion
  - Follow the Iron deficiency anemia pathway
- **Endometrial biopsy:**
  - Consider performing if the patient is > 40 years old with risk factors for endometrial cancer and is experiencing irregular periods for >3-6 months at a time.
  - Refer to a primary care physician with expertise in endometrial biopsy or to gynecology for biopsy if necessary
- **Free Androgen Index**: Consider the addition of Free Androgen Index testing if the patient has historical features of polycystic ovarian syndrome. There is no utility to requesting FSH / LH / estradiol or progesterone levels.[2]
- **Thyroid testing**: Thyroid functioning testing is not indicated unless there are clinical findings suggestive of an index of suspicions of thyroid disease. [1]
- **Coagulation disorders:** Testing for coagulation disorders should only be considered in women with heavy bleeding since menarche or who have a family history/personal history of abnormal bleeding. [1]
- **Transvaginal Pelvic Ultrasound:** For all stable patients, perform transvaginal pelvic ultrasound to rule out uterine structural causes for abnormal bleeding (e.g., polyp).
  - You can refer to the Canadian Public Health Association Guide for providing trauma informed exams.
  - If a Transvaginal pelvic ultrasound is not available or appropriate for the patient, please complete a trans abdominal ultrasound.

5. Management

For all stable patients attempt medical therapy. Ensure no contraindications prior to prescribing:

- **Non-Hormonal Options:**
  - NSAIDS with menses (e.g. Ibuprofen ® 400mg po q6h x5 days or naproxen 500mg po BID x5 days).
  - Tranexamic acid with menses: 1000mg po QID or 1500mg PO TID x 5 days with menses, taken with food.
- **Hormonal Options:**
  - Progesterone-only methods:
    - Levonorgestrel-releasing IUD (referral to gynecology or GP with IUD experience) or
    - Progesterone 100-200 mg PO OD at bedtime daily, or
    - Norethindrone 2.5 to 10 mg orally once a day or 5 to 10 days or
    - Dienogest 2mg PO daily or
    - Medroxyprogesterone acetate 5mg or 10 mg daily for 5 to 10 days
  - Combined contraceptive to decrease the amount of bleeding:
    - Monophasic oral pill, patch or ring.
    - Note contraindications: History of or current VTE, CAD/cerebrovascular disease, breast cancer, other estrogen- dependent malignancy, known or suspected pregnancy, benign or malignant liver tumor/disease, smoking and > 35 years old, uncontrolled hypertension, or migraines with focal neurologic symptoms.

Intermenstrual bleeding or post-coital bleeding

For women with regular monthly cycles (24-38 days) who experience bleeding in between cycles or after sexual intercourse:

- Complete a screening for STIs and treat if positive, according to provincial guidelines (STI Treatment Guidelines).
- For a normal ultrasound and structural/infectious causes ruled out, attempt medical therapy. Ensure no contraindications prior to prescribing:
  - 3 to 6 months of oral monophasic contraceptive pill/ring/patch
  - 3 to 6 months of a progesterone-only method
- If the cervix is friable, treat for mucopurulent cervicitis (STI Treatment Guidelines). If symptoms persist, refer to gynecology for management.

Ultrasound findings

- If a polyp or submucosal fibroid is present, or there is a large fibroid (>5cm) or multiple fibroids, ensure medical therapy is established and complete an initial referral to gynecology.
- If concerning lesion or mass present, initiate an urgent referral to gynecology for biopsy and medical management. A biopsy can be taken by the primary care provider if skilled in this area.

Endometrial biopsy findings

- If endometrial biopsy was indicated, patient is > 40 years old with risk factors for endometrial cancer and is experiencing irregular periods for >3-6 months at a time, then please complete.
- If endometrial biopsy is unable to be completed or insufficient tissue obtained refer to gynecology.
- **Hyperplasia without atypia**
  - Ensure progesterone treatment has been established (levonorgestrel IUD or progesterone 200mg PO QHS). Bleeding should stop within three to six months. If bleeding persists, refer to gynecology.

- Repeat endometrial sampling is indicated in three to six months to ensure resolution of endometrial hyperplasia even if bleeding has ceased. If IUD is in place, endometrial sampling can be completed. Consider referral to gynecology if collection of repeat endometrial sampling support is needed.

- **Hyperplasia with atypia or malignancy**
  - If sampling suggests hyperplasia with atypia or endometrial carcinoma, make an urgent referral to gyne-ONCOLOGY.

6. Advice Options

Severe bleeding or medical instability (i.e. soaking through a protective product per hour or abnormal vital signs). This patient needs to be directed to hospital through RAAPID or the ER. Call RAAPID for on-call gynecologist or 911.

Zone	Program	Online Request	Phone Number	Hours of operation	Anticipated Turnaround Time
Urgent Telephone					
North, Edmonton, Central, Calgary, South	RAAPID	N/A	**North:** 1-800-282-9911 780-735-0811 **South:** 1-800-661-1700 403-944-4486	**7 days per week** 24 hours	1 hour
Non-Urgent Electronic					
Calgary, Edmonton	eReferral (FAQ)		N/A	**Mon - Fri**	5 business days
Non-Urgent Telephone					
Edmonton, North	ConnectMD	Online Request	1-844-633-2263	**Mon - Fri** 9am – 6pm*	2 business days
Calgary	Specialist Link	Online Request	403-910-2551	**Mon - Fri** 8am – 5pm*	1 hour

*There are some exceptions to non-urgent telephone program hours of operation and exclusion

7. Referral Process

- Referral pathways are guidelines to help referring providers know what information, labs and diagnostic imaging are required with their referral to a specialty.
- Referral pathways are co-designed with Primary and Specialty Care, AHS Operations, and patients to ensure the right amount of information is included throughout the referral process to triage the patient as quickly as possible.
- For all referrals to gynecology please ensure to follow the Provincial Adult Gynecology Referral Pathway and use the Provincial Referral Form (if available)
    - If provincial referral pathway is not yet available - Send referral to Gynecology; see Alberta Referral Directory for referral information.
- For hyperplasia with atypia or malignancy, send referral to Gyne-**Oncology**; see Alberta Referral Directory for referral information.

BACKGROUND

About this pathway

- This pathway was developed in collaboration with gynecologists, primary care physicians, patient and family advisors, and the Alberta Health Services (AHS) Provincial Pathways Unit.
- Condition-specific clinical pathways are intended to offer evidence-based guidance to support primary care providers in caring for patients with a range of clinical conditions.

Authors and conflict of interest declaration

- This pathway was initially developed under the auspices of the Calgary Zone Department of Gynecology in 2020 by a multidisciplinary team led by family physicians and gynecologists. In March 2023, in collaboration with gynecologists, primary care physicians, patient and family advisors, and the Alberta Health Services (AHS) Provincial Pathways Unit, the Calgary Zone developed pathway was reviewed and revised in order to make it a provincial primary care clinical pathway for use in Alberta.

Pathway review process, timelines

- Primary care pathways undergo scheduled review every two years, or earlier if there is a clinically significant change in knowledge or practice. The next scheduled review is October 2025. However, we welcome feedback at any time. Please email comments to AlbertaPathways@ahs.ca.

Copyright information

PROVIDER RESOURCES

Resources	Link
TOP Guideline – Cervical Cancer Screening	https://actt.albertadoctors.org/CPGs/Lists/CPGDocumentList/Cervical-Cancer-Screening-Summary.pdf
Alberta STI Treatment Guidelines	https://open.alberta.ca/publications/6880386
SOGC Clinical Practice Guideline No. 292 - Abnormal Bleeding in Pre-Menopausal Women	www.jogc.com/article/S1701-2163(18)30117-8/abstract
Choosing Wisely Canada – Recommendations from the Society of Obstetricians and Gynecologists of Canada	https://choosingwiselycanada.org/obstetrics-and-gynaecology

PATIENT RESOURCES

Resources	Link
Patient Pathway on MyHealth Alberta > A webpage and two PDF formats are available to allow for easy printing, download, or scanning a QR code with the patient's smart phone for more information at their convenience	https://myhealth.alberta.ca/HealthTopics/abnormal-uterine-bleeding-pathway/Documents/abnormal-uterine-bleeding-pathway-summary.pdf
My Health.Alberta.ca > Health Information & Topics> **Abnormal Uterine Bleeding**. Information on causes, symptoms, treatments and resources for women with abnormal uterine bleeding.	https://myhealth.alberta.ca/health/pages/conditions.aspx?Hwid=aa76597
Menstrual Diary to Monitor Premenstrual Symptoms (available from My Health Alberta). Print off a paper-based diary to track your menstrual cycle, along with symptoms and other factors pertinent to your health.	https://myhealth.alberta.ca/health/Pages/conditions.aspx?hwid=aa151402

REFERENCES

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[2] Choosing Wisely. Society of Obstetricians and Gynecologists of Canada: *Nine Things Physicians and Patients Should Question.* Choosing Wisely Canada; 2019. https://choosingwiselycanada.org/obstetrics-and-gynaecology/

[3] Liu, Z, Doan, QV, Blumenthal, P and Dubois, RW. A Systematic Review Evaluating Health-Related Quality of Life, Work Impairment, and Health-Care Costs and Utilization in Abnormal Uterine Bleeding. Value in Health. 2007;10(3):183-194.