Vaginal Bleeding in Pregnancy
(1st / 2nd Trimesters)

Common Causes

- Normal/delayed period
- Threatened miscarriage
- Incomplete mc
- Complete mc
- Missed mc
- Ectopic pregnancy
- Molar pregnancy
- Bleeding disorder
- Trauma
- Blood thinners

Initial investigations

Pregnancy Test (β-hCG)	CBC (Complete Blood Count)	Pelvic Ultrasound (Transvaginal)
Confirm pregnancy if not already confirmed	Assess for anemia, infection	• Rule out ectopic pregnancy • Assess for miscarriage, molar pregnancy or retained products

Further Investigations

Serial β-hCG Levels	Rh Factor and Antibody Screen	Coagulation Profile (If significant bleeding)
Monitor pregnancy progression or diagnose ectopic pregnancy	Consider Rh immunoglobulin (Anti-D) if Rh-negative	Rule out coagulation disorders

Management

Stabilization	Expectant Management	Medical Management	Surgical Management	Rh Immunoglobulin (Anti-D)
• IV fluids if significant blood loss • Monitor vitals and provide supportive care • Prepare for surgical intervention if necessary	For stable cases of threatened miscarriage	• Miscarriage: Misoprostol for medical evacuation • Ectopic Pregnancy: Methotrexate if stable and unruptured	• D&C for incomplete miscarriage or molar pregnancy • Laparoscopy for ectopic pregnancy • Emergency surgery for ruptured ectopic pregnancy	Administer if Rh-negative to prevent isoimmunization

Red Flags

Hemodynamic Instability (shock)	Severe Abdominal Pain	Heavy Vaginal Bleeding
Suspect ruptured ectopic pregnancy	Suggestive of ectopic pregnancy or miscarriage	Consider incomplete miscarriage or molar pregnancy

Vaginal Bleeding in Pregnancy
(3rd Trimester)

Common Causes

- Placenta Previa
- Placental Abruption
- Labor (Bloody show)
- Vasa Previa (Rare but life-threatening)
- Bleeding disorder
- Trauma
- Blood thinners

Initial investigations

Pelvic Ultrasound (Transvaginal)

- Assess fetal well-being and placental position
- Rule out placenta previa or abruption
- Assess for polyhydramnios or oligohydramnios

CBC (Complete Blood Count)

Assess for anemia, infection

Further Investigations (If Required)

- CTG
- Coagulation Profile
- Kleihauer-Betke Test

Management

Stabilization

- IV fluids and blood transfusion if necessary
- Continuous fetal monitoring
- Prepare for urgent delivery if needed

Medical Management

- Corticosteroids for fetal lung maturity (if preterm)
- Tocolytics if indicated to delay preterm labor (with caution)

Surgical Management

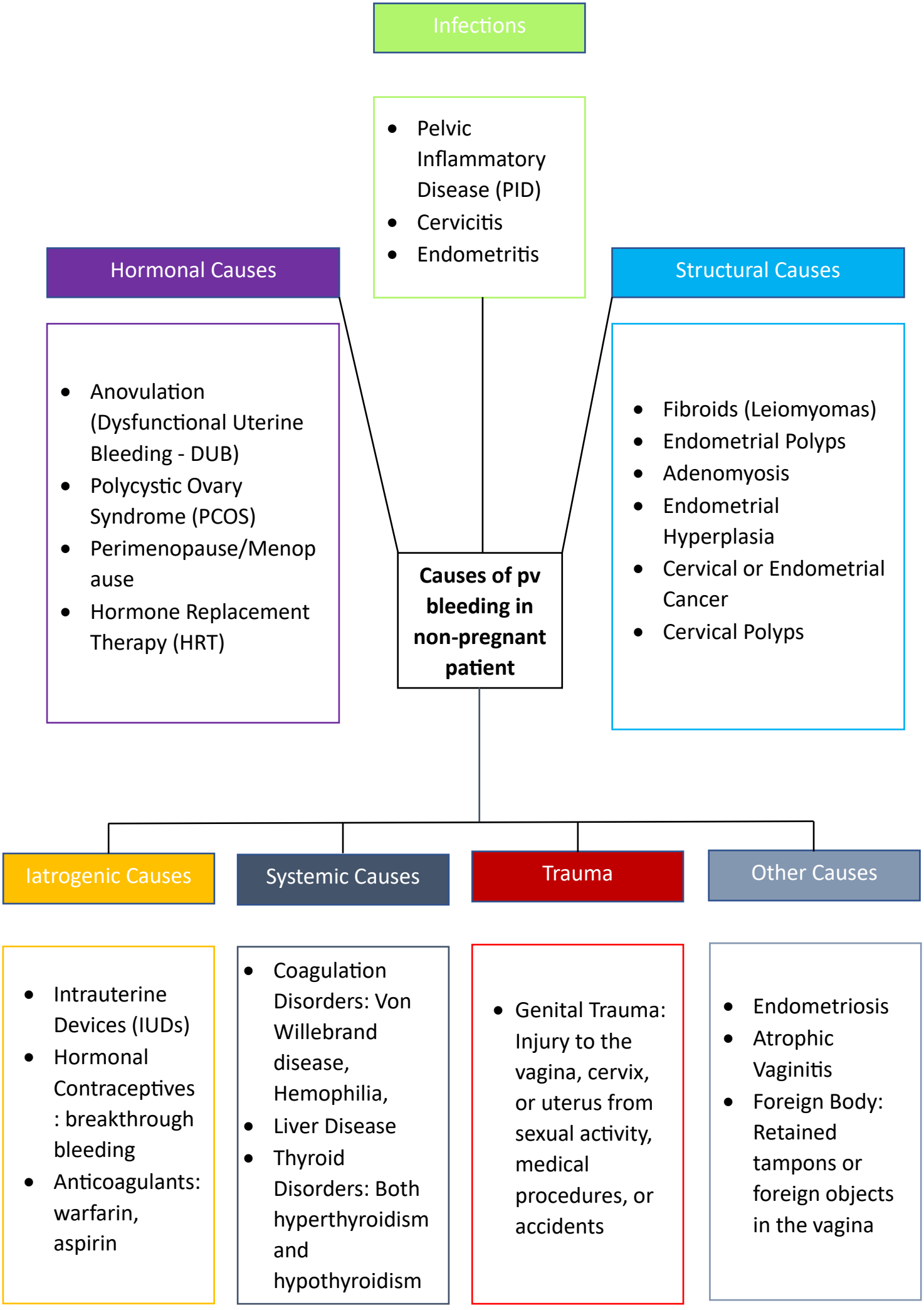
- Cesarean section for placenta previa or abruption
- Emergency delivery for vasa previa or fetal distress

Rh Immunoglobulin (Anti-D)

Administer if Rh-negative to prevent isoimmunization

Red Flags

Heavy Vaginal Bleeding	Severe Abdominal Pain with Bleeding	Abnormal Fetal Heart Rate	Labor Signs with Heavy Bleeding
Suspect placenta previa or placental abruption	Consider placental abruption (painful bleeding)	Consider fetal distress from vasa previa or abruption	Urgent evaluation for placenta previa or placental abruption


Infections
Pelvic Inflammatory Disease (PID)
Cervicitis
Endometritis
Hormonal Causes
Anovulation (Dysfunctional Uterine Bleeding - DUB)
Polycystic Ovary Syndrome (PCOS)
Perimenopause/Menopause
Hormone Replacement Therapy (HRT)
Structural Causes
Fibroids (Leiomyomas)
Endometrial Polyps
Adenomyosis
Endometrial Hyperplasia
Cervical or Endometrial Cancer
Cervical Polyps
Causes of pv bleeding in non-pregnant patient
Iatrogenic Causes
Intrauterine Devices (IUDs)
Hormonal Contraceptives : breakthrough bleeding
Anticoagulants: warfarin, aspirin
Systemic Causes
Coagulation Disorders: Von Willebrand disease, Hemophilia,
Liver Disease
Thyroid Disorders: Both hyperthyroidism and hypothyroidism
Trauma
Genital Trauma: Injury to the vagina, cervix, or uterus from sexual activity, medical procedures, or accidents
Other Causes
Endometriosis
Atrophic Vaginitis
Foreign Body: Retained tampons or foreign objects in the vagina

Vaginal Discharge

Types

Normal Physiological Discharge	Bacterial Vaginosis (BV)	Candidiasis (Candida albicans & glabrata)	Trichomonas Vaginalis (Protozoan)	Other causes
Increased cervical mucus production Milky white or clear mucoid No odor or pruritus Vaginal PH<4.7	Thin, grey-white discharge, fishy Odor Watery, profuse, bubbly Irritation PH 5-6	Thick, white, "cottage cheese-like" discharge, intense itching, soreness, redness No odor PH<4.5	Frothy, green-yellow discharge, vaginal irritation Fishy, malodorous PH 5-6 Sexually transmitted	Cancer of vagina, cervix, uterus STI PID Fistula Foreign body Atrophic Vaginitis

Initial Investigations

- High vaginal swab for microscopy & culture, STIs (PCR)
- Low vaginal swab if suspects BV
- Endocervical swab if suspects PID
- PH test of vaginal discharge
- Amine or whiff test for BV- release of fishy odor with 10% KOH
- Wet film microscopy for candidiasis, clue cells in BV only
- Cervical screening co-test- HPV DNA test + LBC in unexplained, persistent, blood-stained discharge
- USS for endometrial thickness if suspects endometrial malignancy

Management

Reassurance and explain	• Oral Metronidazole 7 days or 0.75% vaginal gel • Oral Clindamycin 7 days or cream (safe in pregnancy or resistance infections) Not STI, treating male partner not recommended	• 1st ep- Clotrimazole/ miconazole vaginal cream 1-7 days • Cant tolerate v.cream- Nystatin pessary • Failed local therapy- oral Fluconazole 150mg as a single dose • Recurrent- Longer course of vaginal azole cream + oral Fluconazole 150mg 3 doses 3 days apart followed by oral 100mg weekly for 6 months	• Metronidazole 2g oral single dose or 400mg bd 5 days if recurrent • Tinidazole 2g oral as a single dose • Treat sexual partners simultaneously • No sexual contact for 7 days after treatment	Atrophic Vaginitis- estrogen cream or pessary Treat STI/PID

Red Flags

- Rule out cervical insufficiency or labor (preterm or term)
- Suspect premature rupture of membranes (PROM) with watery discharge
- Blood-Stained Discharge
- Malodorous, Purulent Discharge with fever