UNIVERSITY OF CALGARY
CUMMING SCHOOL OF MEDICINE

UNDERGRADUATE MEDICAL EDUCATION (UME)
Medical Doctor Program (MD)

COURSE OUTLINE

Course Number:	MDCN 512.01
Course Name:	Obstetrics and Gynecology Clerkship
Dates:	Jan 15, 2024 – Apr 27, 2025
Schedules and classroom locations:	Rotation schedule & location information will be emailed and posted to Osler.

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Course Description
Please refer to the University Calendar: http://www.ucalgary.ca/pubs/calendar/current/medicine.html#8554

Prerequisites
Please refer to the University Calendar: http://www.ucalgary.ca/pubs/calendar/current/medicine.html#8554

Supplementary Fees/Costs
• Lab Coat • Stethoscope

Obstetrics Objectives

1. Maternal Physiology

- Explain normal changes to blood pressure, pulse, respiratory parameters, and aortocaval compression in pregnancy.
- Recognize changes to patient vital signs that signify abnormal conditions (PE/DVT, hemodynamic instability, cardiac disease, AFE, anemia).
- Understand how common tests can change in pregnancy due to changes in maternal physiology:
    - Explain what happens to TSH values in early pregnancy, mid trimester, postpartum, and in molar pregnancy due to beta HCG effect.
    - Identify differential diagnoses for changes to CBC in pregnancy and outline investigations to define specific diagnoses.
    - Explain how pregnancy may increase risk for VTE.

References

1. Hacker & Moore 6th ed. Chapter 6: Maternal Physiologic and Immunologic Adaptation to Pregnancy (p. 61-75) (also Chapter 6 in 5th ed.)
2. Maternal Physiology podcast (Dr. Stephanie Cooper) – OSLER

2. Antenatal Care

Preconception Care

- Obtain a history for a couple desiring conception. Practice an approach to counsel patients towards healthy behaviours in the preconception period including:
    - Appropriate nutrition including iron, calcium and vitamin D
    - Folic acid supplementation
    - Avoiding smoking, alcohol and recreational drugs
    - Exercise and healthy weight
    - Optimizing medical conditions
    - Changing teratogenic medications and stabilizing medications with lowest effective doses
    - Accounting for genetic or demographic risk factors (e.g. consanguinity; populations affected by hemoglobinopathies; etc.) and making appropriate referrals

Diagnosis of Pregnancy

- List 4 ways to diagnose pregnancy and explain the accuracy and limitations of each technique:
    1. Via history (recognize the signs and symptoms of early pregnancy) and physical exam (enlarged uterus, FHR)
    2. Urine pregnancy test
    3. Serum pregnancy test
    4. Ultrasound
- Demonstrate how to date a pregnancy and discuss the benefits, accuracy and limitations of each method:
    - Detailed menstrual history
    - Ultrasound

References:

1. SOGC 388 - Determination of Gestational Age by Ultrasound (Oct, 2019)
2. SOGC 421 - Point of Care Ultrasound in Obstetrics and Gynaecology (Sep, 2021)

First Trimester Pregnancy Complications

- Obtain a focused history and identify risk factors in a patient presenting with symptoms of a miscarriage, molar pregnancy or ectopic pregnancy.
- Describe the relevant history and pelvic examination findings for the different types of miscarriage (missed, incomplete, inevitable, complete, septic).
- Outline the management options for each of these types of miscarriages (stable vs. unstable patient).
- Order and interpret investigations for a patient presenting with first trimester bleeding or pain.
    - Explain the importance of a blood type and antibody screen.
    - List indications for anti-D immune globulin.
- Define a nonviable first trimester pregnancy according to the Early Pregnancy Loss Clinic guidelines.
- Explain the management options for a stable patient with an ectopic pregnancy.
- Outline resuscitation measures and treatment for an unstable patient with an ectopic pregnancy.
- Counsel a patient post methotrexate regarding need for contraception and follow up investigations.
- Identify classic signs, symptoms and ultrasound findings of a molar pregnancy.
- Describe the differences between a complete and a partial mole (clinically and with investigations).
- List the initial steps to investigate and manage a patient with a molar pregnancy.
- Define the post-surgical follow up of a patient with a molar pregnancy and identify when these patients should be referred to gynecologic-oncology.
- Define recurrent miscarriage and order basic investigations for this condition.
- List management options for a patient considering pregnancy termination (therapeutic abortion), including risks of medical vs. surgical treatment.

References:

1. Hacker & Moore 6th ed. Chapter 7; p.79-83 (5th ed. p.74-77)
2. Hacker & Moore 6th ed. Chapter 24: Ectopic Pregnancy p.304-313 (5th ed. p.290-297)
3. Hacker & Moore 6th ed. Chapter 42: Molar Pregnancy p.465-472 (5th ed. p.435-442) *do not need to know extensive details regarding chemotherapy*
4. SOGC 360 - Induced Abortion - Surgical Abortion and Second Trimester Medical Methods (Jun, 2018)
5. SOGC 414 - Management of Pregnancy of Unknown Location and Tubal and Nontubal Ectopic Pregnancies (May, 2021)
6. Early Pregnancy Assessment Handout (OSLER): for determination of viable pregnancy vs. nonviable pregnancy.

General Antenatal Care

- Develop a plan for routine prenatal care for a healthy pregnant patient beginning in the first trimester.
- Order and interpret investigations though a normal prenatal care sequence in a healthy patient. Include standard serology, PAP test if indicated, gestational diabetes screen, GBS screen, dating ultrasound, first trimester screen ultrasound, detailed ultrasound, urinalysis and culture, chlamydia, and gonorrhea screening.
- Demonstrate correct collection of a GBS swab and interpretation of result. Explain how long a GBS swab is deemed valid and know when it should be repeated.
- Perform a focused history and physical examination for a prenatal patient presenting in each of the three trimesters. Demonstrate accurate assessment of blood pressure, symphysis fundal height and fetal heart rate with doppler.
- Identify women with abnormal antibody screen results on serology.
    - List indications for anti-D immune globulin (WinRho / Rhogam). Recall the dose.

- Outline a management plan for a woman with a positive antibody titre for anti-D and define when this patient should be referred to obstetrics / maternal fetal medicine.
- Recognize that any other (outside of anti-D) positive antibody screen should be referred to obstetrics / maternal fetal medicine for consultation.

- Demonstrate opportunities for preventative medicine during prenatal care visits:
  - Describe appropriate vaccinations in pregnancy. Specifically, discuss influenza, pertussis and COVID vaccination when appropriate.
  - Screen for domestic violence in a focused history.
  - Measure and discuss weight gain for pregnancy with all women as early in pregnancy and as regularly as is feasible. Make recommendations for the range of pregnancy-related weight gain based on the pre-pregnancy BMI.
  - Understand the increased risks associated with BMI <18.5 kg/m2 and lower gestational weight gain and increased risks associated with BMI >24.9 kg/m2 and excessive gestational weight gain.
  - When opportunities present, offer smoking cessation information and nutrition / exercise counselling.
- Anemia and Iron Deficiency in Pregnancy
  - Understand the increased maternal and fetal risks associated with iron deficiency and iron deficiency anemia in pregnancy.
  - Order and interpret a CBC and ferritin level in the first trimester of pregnancy.
  - Order and interpret a repeat CBC and ferritin level in the second trimester (24-28 weeks).
  - Diagnose severe iron deficiency anemia, initiate oral iron therapy, and refer for IV iron therapy, when appropriate, as per the Alberta Obstetric Anemia and Iron Deficiency Screening and Treatment Algorithm.
- Create a management plan for a patient presenting to clinic at 40 weeks. Define investigations and options for increased fetal surveillance / induction.

References:

1. SOGC 214 - Guidelines for the Management of Pregnancy at 41+0 to 42+0 Weeks (Aug, 2017)
2. SOGC 276 - Group B Streptococcal Bacteriuria in Pregnancy (May, 2012)
3. SOGC 298 - The Prevention of Early-Onset Neonatal Group B Streptococcal Disease (Aug, 2018)
4. SOGC 324 - Pre-conception Folic Acid and Multivitamin Supplementation (May, 2015)
5. SOGC 333 - Canadian Consensus on Female Nutrition (Jun, 2016)
6. SOGC 357 - Immunization in Pregnancy (Apr, 2018)
7. SOGC 400 - COVID-19 and Pregnancy (Dec, 2020)
8. Hacker & Moore 6th ed. Chapter 7: Antepartum Care p.76-95 (5th ed. p.71-74)
9. Hacker & Moore 6th ed. Chapter 15: Rhesus Alloimmunization p.194-200
10. Hacker & Moore 6th ed. Chapter 16: Common Medical and Surgical Conditions Complicating Pregnancy (p.201-223):
    a. Endocrine disorders (Diabetes see diabetes in pregnancy objectives, review thyroid)
    b. Heart disease
    c. Autoimmune diseases
    d. Renal disorders
    e. GI disorders
    f. Hepatic disorders
    g. Thromboembolic disorders (see thrombosis in pregnancy objectives)
    h. Obstructive lung disease
    i. Seizures
    j. HIV and other infectious diseases, Rubella, Varicella, Herpes Simplex
    k. Bacterial infections
    l. Parasitic infections
    m. Surgical conditions in pregnancy
11. Alberta Obstetric Anemia and Iron Deficiency Screening and Treatment Algorithm

Prenatal Screening and Diagnosis

- Discuss current recommendations for prenatal screening offered for fetal aneuploidy:
    - Describe components of, order and interpret a first trimester screen.
    - Interpret a low PAPP-A and manage a mother with low PAPP-A at first trimester screening.
    - Define options to investigate a positive first trimester screen for aneuploidy:
    - CVS, Amniocentesis, cell free DNA.
    - Correctly list which options are screening tests and which are diagnostic tests for aneuploidy.
- Define the difference between nuchal translucency and first trimester screen.
- List when maternal scrum screen could be considered and when it should NOT be performed.
- Understand that all provinces in Canada may have slightly different variations of genetic screening (all have a standard of care), but first trimester screen is standard of care in Calgary.
- Identify the correct method of screening for neural tube defect.
- Identify populations at increased risk for neural tube defects (low, moderate and high risk per SOGC)
    - Understand that the primary screen for neural tube defect is the routine anatomical screen at 18-22 weeks.
    - Recommend 0.4mg, 1mg or 5mg folic acid per the new SOGC guidelines for low, moderate and high-risk patients.
- Explain the components of a detailed anatomical ultrasound and when in pregnancy this ultrasound is performed:
    - Counsel a patient about a CPC (choroid plexus cyst).
    - Define a follow up plan for a patient found to have a previa or a low-lying placenta on a detailed ultrasound.
- Identify patients at increased risk of offspring with genetic diagnoses from family history or ethnic backgrounds:
    - Recognize conditions that can affect pregnancy / neonate (ie. thalassemia, sickle cell, cystic fibrosis, Tay-sachs, consanguinity, or any other genetic or inheritable conditions).
    - Understand it is prudent to refer these patients to obstetrics and genetics for preconception counseling.

References:

1. SOGC 218 - Carrier Screening for Thalassemia and Hemoglobinopathies in Canada (Oct, 2008)
2. SOGC 348 - Update on Prenatal Screening for Fetal Aneuploidy, Fetal Anomalies, and Adverse Pregnancy Outcomes (Sep, 2017)
3. Hacker & Moore 6th ed. Chapter 7: Antepartum Care P. 83-87 (5th ed. p.78-82) (Patients who require genetic counselling up to Teratology).
4. Hacker & Moore 6th ed. Chapter 17: Obstetric Procedures p.224-228 (5th ed. p.219-222) (Prenatal Diagnostic and Therapeutic Procedures).

Antepartum Fetal Assessment

- Explain fetal movement counting to a patient at a 28-week visit.
- Describe the investigation and management of a patient presenting in the third trimester with decreased fetal movement.
- Interpret a non-stress test for a pregnant patient. Describe a management plan for a patient with a normal, atypical and abnormal NST according to the SOGC guidelines.
- Describe the components of and interpret a Biophysical Profile (BPP).

- Diagnose an abnormal symphysis fundal height:
    - Identify a patient with a small symphysis fundal height and explain the differential diagnosis for a small SFH.
    - Order and interpret relevant investigations including NST, BPP, MCA (middle cerebral artery) and umbilical artery dopplers.
    - Recognize cases of SYMMETRIC growth restriction vs ASYMMETRIC growth restriction and order investigations to diagnose and manage.
    - Diagnose a large for dates / large SFH and describe the differential diagnosis.
    - Order investigations to narrow the differential diagnosis.
- Define conditions for which a mother should receive antenatal corticosteroids to improve fetal outcomes:
    - List fetal benefits of antenatal corticosteroids.
    - Define gestational age where corticosteroids have shown fetal benefit and should be considered.
    - Define the dose of type of corticosteroid used for this purpose.

References:

1. SOGC 197a - Fetal Health Surveillance - Antepartum Consensus Guideline (Apr, 2018)
2. SOGC 364 - Antenatal Corticosteroid Therapy for Improving Neonatal Outcomes (Sep, 2018)
3. EFW video link: www.vimeo.com/efwradiology/teaching password: EFW
4. Hacker & Moore 6th ed. Chapter 12: Obstetric Complications p.164-167 (5th ed. p.153-157)
5. Review large for gestational age. Course 6 notes are appropriate.

3. Hypertensive Disorders of Pregnancy

- Take a focused history from a patient with hypertension, or symptoms of hypertension, in pregnancy.
- Demonstrate an appropriate physical examination on a patient with hypertension in pregnancy.
- Order the appropriate fetal and maternal investigations required to evaluate a patient with hypertension in pregnancy and explain the rationale for ordering each investigation.
- Analyze the data gathered and classify the patient's hypertensive disorder.
- Develop a management plan based on the severity of maternal disease and gestational age of the fetus.
    - Pre-existing or gestational hypertension remote from term
    - Pre-existing or gestational hypertension at term
    - Preeclampsia with adverse conditions or severe complications remote from term
    - Preeclampsia with adverse conditions or severe complications at term
    - Eclampsia
- List the antihypertensive medications that are used in pregnancy, describe the clinical situations in which they are used, explain their mechanisms of action, list their side effects, contraindications and doses.
- Demonstrate a postpartum management plan for a patient with preeclampsia including prevention and evaluation in subsequent pregnancies.

References:

1. SOGC 307 - Diagnosis, Evaluation, and Management of the Hypertensive Disorders of Pregnancy - Executive Summary (May, 2014)

4. Diabetes in Pregnancy

Gestational Diabetes

- Explain how to perform a gestational diabetes screen to a patient.
- Define who should have a gestational diabetes screen, when it should be ordered. Interpret the results. Create a management plan for a patient with an indeterminant and a positive gestational diabetes screen.
- Explain, order and interpret a 2h oral glucose tolerance test for a patient when indicated.
- Counsel a patient regarding appropriate food and exercise choices for a patient with gestational diabetes. Describe blood glucose monitoring to a patient.
- List patients who are at increased risk for gestational diabetes and refer them for an early screen.
- Outline management plan for a patient with gestational diabetes diagnosed at 28 weeks: include visit frequency, fetal investigations and delivery plan.
- Describe postpartum follow up, including investigations for a patient with gestational diabetes.

Type 1 / 2 Diabetes

- Take a complete history and perform a physical examination in a patient with pre-existing diabetes with attention to end organ disease.
- Recognize that patients with Type 1 and Type 2 diabetes are at increased risk for fetal malformations.
- Define goal HbA1c for a patient with type 1 or 2 diabetes prior to pregnancy.
- Describe appropriate folic acid supplementation for a diabetic patient preconception.
- List members of multidisciplinary team involved in care of type 1 or 2 patients. Refer a patient with Type 1 or 2 diabetes for preconception counselling (OBGYN and diabetes in pregnancy).

References:
1. SOGC 393 - Diabetes in Pregnancy (Dec, 2019)
2. Hacker & Moore 6th ed. Chapter 16: Common Medical and Surgical Conditions Complicating Pregnancy p.202-205 (5th ed. p.191-194)
3. Canadian Diabetes Association guidelines – full guidelines Chapter 36: http://guidelines.diabetes.ca
4. OSLER – Calgary Lab Sheet

5. Multiples

- Take a focused history and identify risk factors on history and physical examination for which a patient may have a twin pregnancy.
- Classify the types of twin pregnancy.
- Define the best timing of ultrasound to differentiate between the types of twin pregnancy
- Interpret an ultrasound for each type of twins, recognizing the key findings for each type of twin pregnancy (Dichorionic Diamniotic, Monochorionic diamniotic, monochorionic monoamniotic).
- List common maternal complications in a twin pregnancy.
- Associate fetal complications of pregnancy with the correct type of twin pregnancy in which they occur (eg. poor growth and prematurity; cord entanglement and twin-to-twin transfusion syndrome)
- Develop a basic plan to manage a dichorionic diamniotic twin pregnancy when diagnosed in the first trimester.
- Describe the appropriate care provider for a twin pregnancy and when in pregnancy a referral should be made.
- Define a basic management plan for a dichorionic-diamniotic twin pregnancy including frequency of visits, investigations and delivery plan.

- Define how the timing of a referral should change if this is a monochorionic pregnancy.

References:

1. Hacker & Moore 6th ed. Chapter 13: Multifetal Gestation p.170-177 (5th ed. p.160-166)

6. Cervical Insufficiency, Preterm Labor and Premature Rupture of Membranes

- Define preterm labor and take a focused history on a patient presenting with symptoms of preterm labor.
- Define cervical insufficiency and list risk factors for this condition. Explain how this condition is different from preterm labor.
- Take a focused history in a patient presenting to triage with possible ruptured membranes. Diagnose premature prelabour rupture of membranes with physical examination and appropriate investigations.
- Perform a physical examination and order relevant appropriate investigations for a patient presenting with preterm labor. Interpret the results of trans-vaginal cervical length ultrasound. Identify when a referral to obstetrics is indicated.
- Define management strategies for mother and fetus for:
    - Acute preterm labor:
    - Demonstrate familiarity of tocolytics with side effects, contraindications and effectiveness.
    - Cervical insufficiency:
    - Explain a cerclage.
    - History of preterm labor and preterm birth in a prior pregnancy, presenting for counselling in a current pregnancy:
    - Counsel a patient regarding progesterone supplementation.
    - PPROM (premature preterm rupture of membranes):
    - Describe use of antibiotics for latency.
    - Describe differences in plan for a patient presenting with rupture of membranes <34 weeks vs >37 weeks.
- Acknowledge possible complications of preterm premature rupture of membranes including antepartum hemorrhage, chorioamnionitis, malpresentation, cord prolapse and preterm labor.

References:

1. SOGC 233 - Antibiotic Therapy in Preterm Premature Rupture of the Membranes (Sep, 2017)
2. SOGC 364 - Antenatal Corticosteroid Therapy for Improving Neonatal Outcomes (Sep, 2018)
3. SOGC 373 - Cervical Insufficiency and Cervical Cerclage (Feb, 2019)
4. SOGC 376 - Magnesium Sulphate for Fetal Neuroprotection (Apr, 2019) *specific details are beyond clerk-level expectation*
5. SOGC 379 - Universal Cervical Length Screening (Mar, 2019)
6. SOGC 398 - Progesterone for Prevention of Spontaneous Preterm Birth (May, 2020)
7. Hacker & Moore 6th ed. Chapter 12: p.155-164 (5th ed. p.146-153)
    Some errors:
    - 6th ed. p.158 (5th ed. p.148) we do not give antibiotics for preterm labour, only for GBS prophylaxis (see guideline).
    - Tocolysis: focus on nifedipine and indomethacin as this is what you will see in Calgary.
    - Tests of pulmonary lung maturity no longer performed – please do not focus on this detail.

7. Intrapartum care

GBS:

- Describe the rationale behind GBS prophylaxis in labour and correctly identify when a GBS ‘unknown’ patient should receive prophylaxis.
- Choose appropriate treatment for GBS prophylaxis in a GBS positive or GBS unknown patient who requires prophylaxis.

Reference:

1. SOGC 298 - The Prevention of Early-Onset Neonatal Group B Streptococcal Disease (Aug, 2018)

Fetal Monitoring:

- Counsel a patient about pros and cons of intermittent auscultation (IA) versus continuous electronic fetal monitoring during labour, and appropriately select low risk women for IA.
- Interpret the components of a fetal heart rate tracing and classify an intrapartum fetal heart rate tracing as normal, atypical or abnormal.
- Identify atypical/abnormal fetal heart rate patterns where fetal scalp blood sampling is indicated for assessment of pH and interpret results of this test.
    - Define what pH recommends immediate delivery
- Understand and explain the causes for fetal heart rate decelerations: early, variable and late.
- Describe the principles of intrauterine resuscitation (for an abnormal fetal heart rate) including:
    - Correct reversible cause (eg. Low maternal blood pressure), IV fluids, antibiotics, position changes
    - Identify role for IUPC (intrauterine pressure catheter insertion) and amnio infusion for variable decels from cord compression
- Counsel a woman regarding the presence of meconium in labour, and how this may affect further monitoring (continuous fetal heart rate monitoring), and delivery (neonatal team presence).
- Recognize when urgent delivery for fetal status is required due to abnormal fetal heart rate.

References:

1. SOGC 396 - Fetal Health Surveillance - Intrapartum Consensus Guideline (Mar, 2020)

Labor and Delivery:

- Evaluate a patient presenting with the following conditions in the maternity triage.
- Take a focus history and perform relevant physical examination (supervised).
- List a differential diagnosis and order appropriate investigations.
    - Abdominal pain
    - Vaginal discharge or leaking fluid (?Rupture of membranes)
    - Urinary symptoms: dysuria, flank pain
    - Antepartum hemorrhage
    - Decreased fetal movement
    - Symptoms of gestational hypertension
    - Decreased fetal movement
- Interpret labor progress and define: stages of labor, normal progress, abnormal progress (protraction or arrest) for patients on the labour and delivery unit.
- Recognize labor dystocia and list appropriate interventions: amniotomy, oxytocin, pain control.
- Evaluate fetal position and presentation in laboring patients. Define malposition. Define malpresentation. Apply these definitions to patients experiencing dystocia in labor and list possible management strategies.
- Identify abnormal labor progress as a risk factor for postpartum hemorrhage.
- Demonstrate anticipation, and order IV, CBC, T+S for these patients.
- Describe signs / symptoms of a tetanic contractions and list initial steps in management.
- Assess the station of a patient during a laboring examination. Define “engagement” as used for operative vaginal delivery. Understand when a fetus is engaged and an operative vaginal delivery could be safely considered vs when a fetus is NOT engaged.
    - Assess station on a model describing correct anatomic landmarks.
- Recognize common indications for caesarean section.
- Evaluate a patient for chorioamnionitis: define clinical signs which increase suspicion for this condition.
- Perform a vaginal delivery with assistance.

- Describe the action of delayed cord clamping.
- Deliver a placenta and explain the signs of placental separation. Describe active management of the third stage of labor.
- Perform umbilical cord gas collection (arterial and venous) as well as DAT collection techniques. Interpret results of an arterial cord gas.
- Demonstrate repair of a first- and second-degree tear on a model.
- Learn a one or two hand technique to tie a surgical knot.
- Define clinical signs of uterine rupture in a patient attempting trial of labor after caesarean section.
- Identify 2 absolute contraindications to a trial of labor after caesarean section.
- Apply precautions and list measures of safety recommended for any woman attempting vaginal delivery after caesarean section (OB consult, IV, CBC, consider T+S, epidural, continuous monitoring).

References:

1. SOGC 148 - Guidelines for Operative Vaginal Birth (Feb, 2018)
2. SOGC 155 - Guidelines for Vaginal Birth After Previous Caesarean Birth (Mar, 2018)
3. SOGC 208 - Guidelines for the Management of Herpes Simplex Virus in Pregnancy (Aug, 2017)
4. SOGC 235 - Active Management of the Third Stage of Labour (Dec, 2018)
5. SOGC 330 - Obstetrical Anal Sphincter Injuries (OASIS) (Dec, 2015)
6. Hacker & Moore 6th ed. Chapter 8: Normal Labour and Delivery and Postpartum care p.96-112
7. Hacker & Moore 6th ed. Chapter 11: Uterine contractility and dystocia p.147-154
8. Hacker & Moore 6th ed. Chapter 17: Obstetric Procedures p.228-233

8. OB Anaesthesia

- Counsel a patient about options for pain control in labour (non-pharmacologic, nitrous oxide, IV narcotics, epidural) and during a C-section (epidural, spinal, general anesthetic).
- Explain physiologic changes and apply them to a pregnant patient to demonstrate understanding of safety of regional anesthesia vs general anesthesia. (eg. Airway changes, full stomach etc).
- Describe the indications for pudendal nerve block. Be able to recall the location and nerves involved which supply the perineum.

References:

1. Hacker & Moore 6th ed. Chapter 8: Obstetric Analgesia and Anesthesia p.116-120 (5th ed. p.110-114)

9. OB Emergencies

For All OB Emergencies

- Describe basic approach to a patient in an emergency situation including:
  - Assessment of safety
  - CALL FOR HELP
  - Circulation, Airway, Breathing
- Describe basic management to a sick patient including: close observation of vital signs (mother and fetus), IV access (2 large bore IVs), fluids.
- List important emergency measures for a pregnant patient in a code blue:
  - REMOVE fetal monitors irrespective of gestational age
  - Left uterine displacement
  - CPR / ACLS exactly as per non pregnant patient
  - Delivery of a fetus > 20 weeks by 5 mins

Antepartum Hemorrhage

- Elicit a focused history in a patient presenting with antepartum hemorrhage in the second and third trimesters of pregnancy.
- Perform a physical examination on a patient presenting with antepartum hemorrhage. Demonstrate knowledge that placental location must be known prior to any bimanual or cervical exam and should be avoided if there is a low-lying placenta or a placenta previa.
- Order and Interpret investigations for a patient presenting with an antepartum hemorrhage, using the UofC Black Book scheme differential diagnosis to determine the cause of the antepartum hemorrhage.
- Explain why it is important to order a blood type on a patient with an antepartum hemorrhage.
- Order and interpret a fetomaternal hemorrhage / Kleihauer Betke test for patients with Rh negative blood type. Manage the results of this test including ordering the correct dose of anti D immunoglobulin (Rhogam / WinRho).
- Correctly identify in which condition to order an APT test and interpret the results.
- Outline a basic management plan for a patient presenting with each of the following causes of antepartum hemorrhage:
    - Placenta previa or low-lying placenta
    - Abruption
    - Preterm labor
    - Vasa previa
- Evaluate a fetus when a mother presents with antepartum hemorrhage (continuous fetal heart rate monitoring).
- Outline resuscitation for a mother presenting with severe bleeding, including with maternal or fetal compromise.

References:

1. SOGC 231 - Guidelines for the Management of Vasa Previa (Oct, 2017)
2. SOGC 402 - Diagnosis and Management of Placenta Previa (Jul, 2020)
3. Hacker & Moore 6th ed. Chapter 10: Antepartum hemorrhage p.136-140

Postpartum Hemorrhage:

- Define postpartum hemorrhage in a vaginal delivery and a caesarean section.
- Quantify blood lost in clinical postpartum hemorrhage.
- Identify risk factors for postpartum hemorrhage in the antepartum and intrapartum period.
- Apply the “4 T’s” for causes of postpartum hemorrhage to a patient:
    - Outline initial management of early postpartum hemorrhage, including assessment of vital signs, signs of shock, fluid management, use of drugs, blood work, and the use of blood products.
- Describe mechanical (non-medical) methods to improve uterine atony (empty the bladder, bimanual massage technique).
- Demonstrate knowledge of doses and contraindications for medications used for uterine atony.
- Describe basic surgical management of atonic uterus failing medical management.
- Describe presentation of DIC and initial management of this condition
- Demonstrate knowledge of steps for 1st and 2nd degree tear repair. Recognize that 3rd/4th degree or complicated tear requires OB consult.
- Explain management of a retained placenta, including consulting Obstetrics for manual removal.

Reference:

1. SOGC 235 - Active Management of the Third Stage of Labour - Prevention and Treatment of Postpartum Hemorrhage (Dec, 2018)
2. Hacker & Moore 6th ed. Chapter 10: Obstetric Hemorrhage and Puerperal Sepsis p.140-146 (Hemorrhage to puerperal sepsis) (5th ed. p.131-138)

Amniotic Fluid Embolus, Pulmonary Embolus, Air Embolus

- Recognize clinical presentations of AFE / Pulmonary embolus. Outline initial emergency measures.

References:

1. Hacker & Moore 6th ed. Chapter 16: Common Medical and Surgical Complications of Pregnancy p.216-217

Cord Prolapse

- Recognize risk factors for cord prolapse.
- Identify need for vaginal examination or speculum examination to rule out cord prolapse with rupture of membranes and fetal heart rate abnormalities.
- Describe method of delivery with cord prolapse, and resuscitation steps while awaiting urgent caesarean section:
    - Student should be able to describe how to keep pressure off the cord while awaiting emergent caesarean section.

Shoulder Dystocia

- Identify risk factors for shoulder dystocia.
- Describe clinical presentation of shoulder dystocia.
- Outline initial steps in shoulder dystocia: call out time, call for help (Peds, nurses, OB, anaesthesia).
- Describe clinical methods for resolution of shoulder dystocia (eg. ALARMER etc).

References:

1. SOGC 415 - Impacted Fetal Head, Second-Stage Cesarean Delivery (Jun, 2021)
2. Hacker & Moore 6th ed. Chapter 11: Uterine Contractility and Dystocia p. 152-153 (5th ed. p.143-144)
3. ACOG practice bulletin 178 Shoulder Dystocia (May 2017)

10. Postpartum Care

- Model advice you would give a postpartum woman prior to leaving the hospital, including reasons to return to the ER (excess bleeding, signs of infection/DVT/PE, fever), activity restrictions (bathing/driving/lifting) and recommended F/U with GP/OB.
- Recall normal lactation expectations, and common concerns with lactation difficulties (poor latch, cracked nipples, mastitis, poor supply). Identify a management plan for each of these issues. Counsel a patient regarding medications with breast feeding – list appropriate resources to look up the safety of medications in a lactating woman.
- Discuss resources for difficulty with breastfeeding:
    - Lactation consultant, public health, breast feeding specialist, GP
- Explain use of analgesics postpartum for vaginal delivery and caesarean section. Include advice regarding narcotics (minimize use by maximizing acetaminophen/NSAIDs, return extra tabs to pharmacy, stool softener), as well as alternative treatments for pain including ice / frozen pads.
- Describe care for expected healing of perineal tears: Sitz baths, and pericare. Offer advice regarding physiotherapy self-referral and Kegel exercises.
- For patients with gestational hypertension. Outline a plan for safety postpartum (BP measurement schedule, guidelines for limits and when to return to hospital, BP check in 3-5 d with MD, how to use medication).
- Discuss treatment of hemorrhoids:
    - Stool softener, Anusol HC, ice packs, alternative treatments including Tucks pads / Witch Hazel

- Recall which contraceptives can be given immediately postpartum.
- List causes of postpartum abdominal pain and methods (Hx, PE, investigations) to differentiate these.
- Differentiate “blues” from postpartum depression.
- List the differential diagnoses for postpartum fever (Ws).
    - Describe the clinical presentation of endometritis in terms of Hx, PE, investigations. Recall therapeutic treatment options.
    - Describe the presentation of cellulitis, wound hematoma and wound abscess in terms of Hx, PE, investigations.
    - Recall therapeutic options:

    - Discuss preventative measures for PE, atelectasis, mastitis, wound infection, endometritis, UTI.
- Model inquiries and the advice you would give a typical patient at a 6-week postpartum visit, including options for contraception (breastfeeding and not breastfeeding) and non-verbal methods of communication.

<u>References:</u>

1. Hacker & Moore 6th ed. Chapter 8: Section on Postpartum Care p.113-116 (5th ed. p.109-110)

Gynecology Objectives

1. Abnormal Uterine Bleeding

- Take a focused history and supervised physical examination for a patient presenting to clinic with abnormal uterine bleeding.
    - Using PALM-COEIN definitions from the SOGC's guideline 292 for Causes of Abnormal Uterine Bleeding commit to a differential diagnosis and order appropriate investigations.
- Demonstrate the steps to an endometrial biopsy and removal of a cervical polyp on a model
- For each of the causes of abnormal bleeding, determine the most appropriate management options including medical, procedural and surgical options.
- Discuss how to rule out neoplasia as a cause of abnormal bleeding (cervical neoplasia, endometrial neoplasia, vaginal or vulvar neoplasia)

References:

1. SOGC 292 - Abnormal Uterine Bleeding in Pre-Menopausal Women (May, 2018) *Excellent guideline*
2. SOGC 318 - The Management of Uterine Leiomyomas (Feb, 2015)
3. Hacker & Moore 6th ed. Chapters 3 & 4: Anatomy of Physiology of Female Reproductive Tract p.23–36 and p.37-49 *important for background understanding of physiology*
4. Hacker & Moore 6th ed. Chapter 19 & Chapter 33: Benign Conditions and Congenital Anomalies of the Uterine Corpus and Cervix p.248-257 *treatments options NOT very up-to-date*
5. Hacker & Moore 6th ed. Chapter 33: Amenorrhea, Oligomenorrhea, and Hyperandrogenic Disorders p.380-394.

2. Amenorrhea

- Take a focused history and perform a physical exam to determine the possible etiology of amenorrhea.
- Establish differential diagnosis for primary and secondary amenorrhea, distinguishing hypothalamic, pituitary, ovarian, and lower reproductive tract etiologies.
- Order and interpret investigations in a logical stepwise order for primary and secondary amenorrhea. Student must know to rule out pregnancy as a cause.
- Outline management options for amenorrhea caused by:
    - Premature ovarian failure
    - Polycystic ovarian syndrome
    - Asherman's syndrome
    - Hypothalamic amenorrhea due to eating disorder

References:

1. Hacker & Moore 6th ed. Chapter 32: Puberty and Disorders of Pubertal Development p.370-379
2. Hacker & Moore 6th ed. Chapter 33: Amenorrhea, Oligomenorrhea, and Hyperandrogenic Disorders p.380-394.

3. Vaginal Discharge and STI

- Take a focused sexual history on a patient presenting with vaginal discharge.
- Explain normal physiologic vaginal discharge at different times in a menstrual cycle and in pregnancy.

- Perform a pelvic examination including collection of swabs for bacterial vaginosis (BV), yeast, trichomonas, chlamydia and gonorrhea on a model.
- Interpret the results of BV/Yeast, trichomonas, chlamydia and gonorrhea investigations. Manage the patient using Canadian STD guidelines.
- Investigate for and diagnose PID in a patient with pelvic pain / vaginal discharge. Describe management of PID as an outpatient. List patients who should receive inpatient treatment for PID.
- Review a patient presenting with a genital ulcer by history, and physical examination. List a differential diagnosis and the investigations for a genital ulcer.

References:

1. SOGC 207 - Genital Herpes - Gynaecological Aspects (Jul, 2017)
2. SOGC 208 - Guidelines for the Management of Herpes Simplex Virus in Pregnancy (Aug, 2017)
3. SOGC 320 - Vulvovaginitis - Screening for and Management of Trichomoniasis, Vulvovaginal Candidiasis, and Bacterial Vaginosis (Mar, 2015)
4. Hacker & Moore 6th ed. Chapter 22: Infectious Diseases of the Female Reproductive Tract p.276-290.
5. Alberta STI guidelines 2018
6. Canadian STD Guidelines (for PID only, otherwise use Alberta guidelines)

4. Pelvic Pain

- For a patient presenting with acute pelvic pain, perform a focused history and supervised physical examination and order relevant investigations.
- List the differential diagnosis for acute pelvic pain. Interpret the clinical picture and outline management for each of the following presentations of acute pain:
    - Pelvic Inflammatory Disease
    - Ectopic pregnancy (see Obstetrics objectives, Antenatal care)
    - Ovarian cysts
    - Endometritis
    - Non-gynecologic causes for pain such as appendicitis and renal colic
- Identify an unstable patient presenting with acute pelvic pain and describe initial resuscitation measures.
- For a patient presenting with chronic pelvic pain, obtain a thorough yet focused pain history, perform a supervised physical examination and order relevant investigations. Interpret the results and offer a management plan for each of the following conditions:
    - Dysmenorrhea: primary and secondary
    - Define causes of secondary dysmenorrhea
    - Ovarian masses
    - Dyspareunia and pelvic floor dysfunction
    - Fibroids
    - Neurologic pain

References:

1. SOGC 164 - Consensus Guidelines for the Management of Chronic Pelvic Pain (Nov, 2018)
2. SOGC 244 - Endometriosis - Diagnosis and Management (Jul, 2010)
3. SOGC 345 - Primary Dysmenorrhea Consensus Guideline (Jul, 2017)
4. Hacker & Moore 6th ed. Chapter 21: Pelvic Pain p.266-275 (5th ed. p.256-264) and Chapter 25: Endometriosis and Adenomyosis p.314-321 (5th ed. p.298-304)
5. Website: Endometriosis and U

5. Vulvar Dystrophies

- Recognize common vulvar dermatoses, including lichen sclerosis, contact/allergic dermatitis, lichen simplex chronicus and vaginal atrophy.
    - Describe the classical clinical presentations in terms of history and physical exam findings
    - Explain steps of vulvar biopsy for confirmation of diagnosis
    - Outline treatment algorithm
- Recall the long-term risk of progression of untreated lichen sclerosis to vulvar intraepithelial neoplasia or carcinoma and recognize the need for serial follow-up visits.
- Recognize that any new lesion, any treatment-resistant lesion or any ulcer that appears in a background of lichen sclerosis requires biopsy to rule out cancer.
- Discuss how VIN (vulvar intraepithelial neoplasia) is diagnosed and what follow up is required for this diagnosis (referral to gynecologic-oncology).
- Recognize condylomata and outline medical and surgical options for management.

References:

1. Hacker & Moore 6th ed. Chapter 18: Benign Conditions and Congenital Anomalies of the Vulva and Vagina (Vulva to Congenital Anomalies) p.236-241 (5th ed. p.231-239)
2. Hacker & Moore 6th ed. Chapter 22: Infectious Diseases of the Female Reproductive Tract, HPV Condyloma Treatment p.283-284 (5th ed. p.270)
3. Hacker & Moore 6th ed. Chapter 40: Vulvar and Vaginal Cancer p.449-456 (5th ed. p.420- 427) *mostly above clerkship level; read for interest*
4. Cards: Vulvar disease

6. Contraception

- Counsel a patient to the risks and benefits of various contraceptive options including behaviour methods, barrier methods, IUDs, combined estrogen / progesterone contraceptive options (oral, patch, ring), progesterone-only methods, and sterilization options.
    - Describe method of initiation of an oral contraceptive pill, patch or ring and provide advice for management of missed contraceptives to a patient
    - List common side effects of the above options of contraception
    - Recognize contraindications to each type of contraceptive listed
    - Recall the failure rates of each option in counselling a patient
    - Counsel a patient in anticipation of an IUD insertion in the office (including the expected procedure steps, short-term and long-term risks)
- Recognize an opportunity for prescribing emergency contraception
    - Counsel a patient how to use this medication, offer follow up plans (e.g. When should she do a pregnancy test?) and discuss managing potential side effects (e.g. nausea)

References:

1. SOGC 305 - Best Practices to Minimize Risk of Infection With Intrauterine Device Insertion (Mar, 2014)
2. SOGC 329 - Canadian Contraception Consensus (Oct, 2015)
3. Hacker & Moore 6th ed. Chapter 26: Family planning p.327-334 (5th ed. Chapter 27 p.305-314) *SOGC consensus is better than this*
4. Website: For physicians and Patients: SexualityandU – see Contraception

7. Surgical Care and Post-op Complications

- Describe the components of Surgical Consent: explain procedure, rationale, alternatives, complications and sequelae (PRACS).
- Recognize clinical presentations of common post-surgical complications such as fever, wound infection, wound hematoma, ileus, DVT, low urine output, and urinary retention, and outline a basic plan for investigation and management of these complications.
- Develop a plan for investigation and diagnosis in a patient who presents with symptoms of a possible DVT or PE in pregnancy, postpartum or postop from gynecologic surgery.
- Demonstrate knowledge of writing basic post-op orders for common gynecologic post op patients (following eg. AD DAVIID orders).
    - Laparoscopic day surgery
    - Laparotomy with admission

References:

1. SOGC 209 - Postoperative Nausea and Vomiting (Jul, 2008)
2. SOGC 247 - Antibiotic Prophylaxis in Obstetric Procedures (Sep, 2017)
3. SOGC 275 - Antibiotic Prophylaxis in Gynaecologic Procedures (Oct, 2018)
4. SOGC 412 - Laparoscopic Entry for Gynaecological Surgery (Mar, 2021)
5. SOGC 417 - Prevention of Venous Thromboembolic Disease in Gynaecological Surgery (Jan, 2022)
6. Hacker & Moore 6th ed. Chapter 31: Gynecologic Procedures p.356-369
7. Websites (above clerkship level but interesting references for VTE prophylaxis)
    a. CHEST prevention of VTE in Non-orthopedic Surgical Patients
    b. CHEST Perioperative Management of Antithrombotic Therapy

8. Abnormal PAP smear and Cervical Cancer Screening

- Explain when to initiate PAP screening.
- Demonstrate correct collection of a PAP smear sample on a model.
- Counsel a patient who presents with an abnormal PAP smear result.
- Create a list of patients who require colposcopy and annual screening (increased surveillance).
- Explain the role of HPV testing in PAP screening.
- List the high-risk HPV subtypes for genital cancer and describe the vaccination program options.
- Counsel a patient regarding the procedure of colposcopy (basics of what to expect).

References:

1. SOGC 284 - Colposcopic Management of Abnormal Cervical Cytology and Histology (Dec, 2012) *above clerkship level expectations
2. Hacker & Moore 6th ed. Chapter 38: Cervical Dysplasia and Cancer p.429-434 and p.437-439. (5th ed. p.402-406 and p.410-411) *All very relevant except treatment of invasive cervical cancer (above clerkship level).
3. Website: www.hpvinfo.ca
    a. View the “My First Visit to a specialist: An ABN Pap test”
    b. View “how does the HPV vaccine work?”
4. TOP Cervical Cancer Screening Summary
5. YouTube: Colposcopy Procedure (View prior to gynecologic-oncology rotation)
6. SOGC/GOC: Contemporary Clinical Questions on HPV related Diseases and Vaccination

9. Infertility

- Take a focused history to determine possible risk factors or causes for a couple presenting with infertility.
- Create an approach to investigate the differential diagnoses for a couple presenting with infertility.
- Define primary vs secondary infertility.
- Identify which patients should have an early referral to an infertility specialist.
- Describe signs and symptoms of a patient presenting with ovarian hyperstimulation.
- Explain the cause of ovarian hyperstimulation syndrome (assisted reproductive technology and ovarian stimulation) and describe management of this condition (supportive care).
- Demonstrate basic knowledge of treatment options available for a couple with infertility.
- Associate known causes of infertility with management options (eg. The management approach for obstructed fallopian tubes and oligo-ovulation are very different, and have differing success rates).

References:

1. SOGC 268 - The Diagnosis and Management of Ovarian Hyperstimulation Syndrome (Nov, 2017)
2. SOGC 350 - Hirsutism - Evaluation and Treatment (Nov, 2017)
3. SOGC 362 - Ovulation Induction in Polycystic Ovary Syndrome (Jul, 2018)
4. Hacker & Moore 6th ed. Chapter 34: Infertility and Assisted Reproductive Technologies p.395-405.
5. ½ day presentation from REI physicians
6. Calgary Regional Fertility Program

10. Menopause

- Define menopause and differentiate it from premature ovarian failure.
- Take a focused history from and demonstrate an appropriate physical examination on a woman who presents with menopausal symptoms (include Hot flashes, night sweats, insomnia, memory issues, genitourinary symptoms of menopause/vulvovaginal atrophy symptoms, urinary symptoms, prolapse, contraindications to hormone therapy).
- Describe the role of FSH, LH, estradiol and testosterone testing in the diagnosis of menopause.
- Describe risk management strategies in preventative health of post-menopausal women.
- Explain the nonhormonal and hormonal management options for a woman with hot flashes and night sweats. Include the indications, contraindications, efficacy, risks, benefits, side effects, and dosage of each option in your explanation.
    - Lifestyle modifications
    - Nonhormonal options: clonidine, SSRIs/SNRIs, gabapentin, pregabalin
    - List at least 1 non hormonal option
    - Menopausal hormone therapy – transdermal and oral
    - Describe when a woman MUST have progesterone as part of this management option.
    - Duavive (conjugated estrogens and bazedoxifene)
- Demonstrate a focused history and physical examination for postmenopausal bleeding.
- Order and interpret the appropriate investigations for postmenopausal bleeding.
- Diagnose and outline management options for a woman who presents with the genitourinary syndrome of menopause (vulvovaginal atrophy).
    - Nonhormonal options: water-based lubricants, vitamin E oil, vaginal moisturizers, regular sexual activity

- Hormonal options: Estring, Premarin vaginal cream, Vagifem, Estragyn
- Controversial and potentially on the horizon: Vaginal DHEAs, CO2 laser

References:

1. SOGC 249 - Asymptomatic Endometrial Thickening (May, 2018)
2. SOGC 422 – Menopause (Oct, 2021)
3. Hacker & Moore 6th ed. Chapter 19: Section on Endometrial Hyperplasia p.54-255 (5th ed. p.246-247)
4. Hacker & Moore 6th ed. Chapter 35: Menopause and Perimenopause p.406-413 (5th ed. p.379-385)
5. Interesting website for physicians and patients: MenopauseandU

11. Pelvic Mass

- Obtain a focused history and perform a supervised abdominal / pelvic examination on a patient presenting with / referred for a pelvic mass.
- Formulate a differential diagnosis for pelvic masses based on anatomic site (uterus and cervix, fallopian tube, ovary, vagina, vulva).
- Recognize a photo of a Nabothian cyst, cervical polyp and Bartholin's cyst/abscess.
- Recommend the most appropriate investigations for pelvic mass.
- Cervical / Vulvar mass: Biopsy / refer to gynecology / Gynecologic-oncology to biopsy.
- Identify risk factors for a cervical ectopic pregnancy.
- Outline initial management plan of a cervical ectopic: include referral to obstetrics and AVOID biopsy.
- Pregnancy test.
- Transvaginal ultrasound vs CT scan.
- Identify imaging findings which are concerning for a malignant ovarian mass on ultrasound.
- Markers for ovarian cancer CA 125.
- Interpret results of CA125 test in association with pelvic mass in premenopausal and in postmenopausal woman.
    - Identify at least 3-4 benign conditions which can slightly elevate a CA125 reading in a premenopausal female.
    - Understand that CA 125 is a marker for epithelial ovarian cancer and peritoneal cancer.
- List markers for germ cell tumors of the ovary: AFP, LDH, BHCG.
- Identify hormonal markers associated with sex-chord stromal tumors.
- Recognize the 3 cell lines in the ovary from which ovarian tumors can arise from, and the classic presentations of the malignant versions of these:
    - Benign ovarian masses
    - Recognize characteristics of a functional or hemorrhagic cyst and offer treatment options
    - Identify the components of a dermoid cyst and explain treatment options
    - Describe the classic picture of an endometrioma (chocolate cyst) and describe treatment options
    - Understand a theca Lutein cyst and know the association with molar pregnancy and fertility treatments
    - Define management of a theca lutein cyst
- Metastatic Ovarian Masses:
    - Recognize common metastatic cancers to the ovary are breast and GI
- Fibroids:
    - Describe clinical presentations associated with fibroids
    - Define management options based on symptom control (mass effect vs bleeding)
    - Pregnancy:

- Recognize signs and symptoms of a fibroid degeneration in pregnancy. Outline basic management.
- Classify which fibroids might obstruct labour.

- Recognize uterine sarcoma is a fast-growing tumor, which is NOT a fibroid, and suspicion requires referral to gynecologic-oncology.
- Describe the presentation of and treatment options for a patient with a hydrosalpinx.
- Fallopian tube carcinoma:
    - Recognize that this is very similar to epithelial ovarian cancer, including listing key features - postmenopausal, elevated CA 125 with pelvic mass and ascites.
- Describe management of a Nabothian cyst, cervical polyp and Bartholin's gland cyst or abscess if they are seen on presentation to a GP office at an annual physical examination.

References:

1. SOGC 403 - Initial Investigation and Management of Adnexal Masses (Aug, 2020)
2. Hacker & Moore 6th ed. Chapter 18: Bartholin's Gland p.244-245 (5th ed. p.237)
3. Hacker & Moore 6th ed. Chapter 19: Benign Conditions p.248-253 (5th ed. p.240-246) *Read to end of 'cervical polyps'*
4. Hacker & Moore 6th ed. Chapter 20: Benign conditions of the ovaries p.258-265 (5th ed. p.248-255)
5. Hacker & Moore 6th ed. Chapter 39: Ovarian, Fallopian Tube and Peritoneal Cancer p.440-448 (5th ed. p.412-419).
6. Hacker & Moore 6th ed. Chapter 41: Uterine Corpus Cancer p.457-464 (5th ed. p.428-434) *Do not need to know details of staging and therapy*

12. Prolapse and Incontinence

Incontinence

- Outline a differential diagnosis for a patient presenting with urinary incontinence and elicit information on history and physical examination to differentiate causes.
- Describe initial investigations required. Differentiate which conditions are best treated medically and which respond well to surgical management (stress vs urge).
- Understand role of physiotherapy for incontinence.

Prolapse

- Identify risk factors for pelvic floor relaxation.
- Recognize and differentiate anterior prolapse, posterior prolapse and vaginal vault or uterine prolapse.
- Describe surgical and non-surgical (e.g. pessary) treatment options for prolapse.
- List complications of a pessary and initial management.
- Understand role of physiotherapy for prolapse.

Reference:

1. SOGC 411 - Vaginal Pessary Use (Feb, 2021)
2. Hacker & Moore 6th ed. Chapter 23: Pelvic Floor Disorders

13. Female Sexuality

- Identify the wide range of disorders that are manifestations of female sexual dysfunctions.
- Discuss diverse options in the assessment, evaluation, and treatment of female sexual difficulties.
- Appreciate the importance of consultation and collaboration in supporting patients experiencing sexual dysfunction.

References:

1. Hacker & Moore 6th ed. Chapter 28: Sexuality and Sexual Dysfunction (5th ed. Chapter 27)
2. Website: Sexuality and U Sexual Dysfunction and website online

14. Gender Affirming Care

- Develop confidence in your vocabulary as it relates to sex, gender, anatomy and sexual health.
- Develop skills and knowledge in gender affirming approaches to physical exam for transgender and gender diverse patients.
- Demonstrate knowledge of obstetrical and gynecological assessment and treatment commensurate with the physical attributes and desires of the patient (i.e., pregnancy support for transgender men).

References:

1. Core document: Gender Affirming Care and Physical Exam Considerations (see Osler)
2. Video: Providing trans-competent cervical cancer screening

15. Pediatric Gynecology

From infancy through to adolescence:

- Describe appropriate history and physical examination techniques for each specific age.
- Describe the Tanner staging for pubertal development.
- Discuss and describe the evaluation and management of the following common gynecologic presentations:
    - Vulvar ulcers
    - Vulvovaginitis
    - Labial agglutination / adhesions / fusion
    - Lichen sclerosis
    - Traumatic genital injuries
    - Vaginal bleeding
- Describe female reproductive anatomy variances and common clinical presentations observed.
- Discuss age-appropriate management of:
    - Contraception
    - STI protection / prevention
    - Abnormal uterine bleeding and menstrual management
    - Pelvic pain

References:

1. Hacker & Moore 6th ed. Chapter 2: Vaginal bleeding in prepubertal child p.21.
2. Hacker & Moore 6th ed. Chapter 32: Puberty and Disordered of Pubertal Development p.370-379.

Course Text(s)/Recommended Reading/Learning Resources

Recommended Textbook and Readings:

1. **Hacker and Moore's Essentials of Obstetrics and Gynecology (6th Edition, 2016). Hacker, Gambone, and Moore. Available online through U of C library or in the U of C medical book store. * The 5th edition references are also listed in the Objectives and references document for anyone who has a copy of the 5th edition*

2. 2024 OBGYN Objectives and References document ** online OSLER edition will always be considered as the most up to date document if questions arise**

Useful Links:

Society of Obstetricians and Gynaecologists of Canada http://www.sogc.org/
All references to SOGC guidelines can be found on this website – however, as most of you will not have a membership, there are instructions in the 2024 OBGYN Objectives and References Document for you to be able to access JOGC online through the library where all the guidelines are published.

Evaluation and Course Requirements

OBSTETRICS & GYNECOLOGY Class of 2025

- Final Written MCQ (summative) = MP
- Satisfactory Final Preceptor ITERS = MP
- Workbook = MC#
- Formative Midpoint MCQ = MC*
- Midpoint Formative ITER = MC
- Logbook = MC*
- On-call Expectations = MC
- Clinical Expectations = MC
- Attendance and participation in teaching sessions = MC
- Professionalism Expectation = MP
- Meet all expectations outlined in Core Document = MC

MP = must pass (failure to do so will result in overall evaluation of "Unsatisfactory" for rotation)

MC = must complete (failure to do so will result in overall evaluation of "Satisfactory with Performance Deficiency" for rotation)

MC* = must complete before rotation deadline (failure to do so will result in requirement to defer summative examination to the deferral/rewrite date)

UCLIC student meet all expectations listed for rotation-based clerks except those noted by

Please refer to Clerkship Student Handbook - https://cumming.ucalgary.ca/mdprogram/current-students/clerkship/student-handbook and core document on OSLER - https://osler.ucalgary.ca/

Calculators for MCQ exam – simple calculators are allowed for your exams.

Assessment Dates
The assessment dates provided in the Evaluation and Course Requirements may be subject to change due to circumstances beyond the MD Program's control. In the event that an assessment date must be changed notification of the change will be emailed to the student by the evaluation team and posted on OSLER. Students will be given as much notice of the assessment date change as possible. The pre-clerkship schedule of all courses can be found on the timetable here https://cumming.ucalgary.ca/mdprogram/current-students/pre-clerkship-year-1-2/timetable The detailed day by day schedule is found on Osler. https://osler.ucalgary.ca/

Grading

The University of Calgary Medical Doctor Program is a Pass/Fail program. The grading system that will appear on a student's legal transcript is as follows:

Grade	Description
CR	Completed Requirements
RM	Remedial Work Required
F	Fail
I	Incomplete
W	Withdrawal
MT	Multi-Term (Used for Part A Courses that fall under 2 different terms in the calendar year.)

For Pre-Clerkship - A student's final grade for the course is the sum of the separate components. It is not necessary to pass each mandatory component separately in order to pass the course.

For Clerkship - A rotation signed off as "Satisfactory with Performance Deficiencies" will appear as a credit on a student's medical school transcript.

Assignments/Projects
The following criteria shall generally apply to all written assignments. Students are expected to submit all major assignments on or before the due dates. Unless prior arrangements have been made, major assignments worth marks submitted after the specified due date will be considered late. Late major assignments will receive a 0 % grade. Other assignments will not be accepted after the due date.

Timeliness

In general, dates listed in Core Documents are intended to act as guidelines for assisting students to complete their learning activities and assignments in a timely fashion. Students encountering difficulties completing assignments due to health or other serious factors must contact the Course Chair to arrange a deferral of term work. A Physician/Counsellor Statement to confirm an absence for health reasons may be required.

Professional Conduct

As members of the University community, students and staff are expected to demonstrate conduct that is consistent with the University of Calgary Calendar. The specific expectations cited in the Calendar include

- Respect for the dignity of all persons
- Fair and equitable treatment of individuals in our diverse community
- Personal integrity and trustworthiness
- Respect for academic freedom, and
- Respect for personal and University (or Host Institution) property.

Students and staff are expected to model behaviour in class that is consistent with our professional values and ethics. Students and staff are also expected to demonstrate professional behaviour in class that promotes and maintains a positive and productive learning environment. All students and staff are also expected to respect, appreciate, and encourage expression of diverse world views and perspectives. All members of the University community are expected to offer their fellow community members unconditional respect and constructive feedback. While critical thought and debate is valued in response to concepts and opinions shared in class, feedback must at all times be focused on the ideas or opinions shared and not on the person who has stated them.

Where a breach of an above-mentioned expectation occurs in class, the incident should be reported immediately to the Associate Dean or his/her designate. As stated in the University Calendar, students who seriously breach these guidelines may be subject to a range of penalties ranging from receiving a failing grade in an assignment to expulsion from the University.

University of Calgary Medical School – Student Code of Conduct
https://cumming.ucalgary.ca/mdprogram/current-students/pre-clerkship-year-1-2/student-code-conduct

Electronic Submission of Course Work

Most assignments will be submitted via email to the Program Coordinator, UME unless otherwise stated. Assignments may be submitted in MS Word or Rich Text formats. It is the student's responsibility to confirm with the Program Coordinator that the assignment has been received. This may be done through utilization of the return receipt function available on most email packages, or by a follow up confirmation email to the Program Coordinator.

It is the Program Coordinator's responsibility to reply to any confirmation email from the student, and to inform the student promptly if there are any problems with the file (unable to open attachment, damaged data, etc.). In such cases, it is the responsibility of the student to promptly consult with the Program Coordinator regarding an alternate delivery method (e.g. courier, fax, etc.). It is the student's responsibility to retain a copy of the original document.

One45 Overview
The MD Program utilizes the One45 Software Program for assessment purposes for all evaluations in Year 1, 2 and 3. Students are able to view completed evaluations online through this software program. Evaluations and assessment data are collected at regular intervals. It is the student's responsibility to distribute their evaluations to preceptors during any given course and to follow up with preceptors if evaluations have not been completed by the deadline given out by the Undergraduate Medical Education (UME) Office. In addition to assessments and evaluations, One45 is also utilized to evaluate your preceptors and to gather information from students on their learning experiences. All students are provided training at the beginning of their program in Year 1. This would include a personal log in access code and password. One45 is used throughout your training in the MD Program (Undergrad) as well as Residency (PGME). Website Link to Access One45: https://calgary.one45.com/ Problems Accessing One45: Please contact the Academic Technologies at osler@ucalgary.ca

Course Evaluation/Feedback
Student feedback will be sought at the end of each learning session as well as at the end of each course through the electronic UME evaluation tool. At the end of each learning activity (ie. Lecture, small group, orientations, etc.), students will be asked to complete online evaluation forms to provide feedback to instructors regarding the effectiveness of their teaching and achievement of the learning objectives. An overall course evaluation will be completed following course completion. Students are welcome to discuss the process and content of the course at any time with the Course Chairs or Preceptors.

Clinical Core Overview (Pre-Clerkship Only)
Please refer to the Clinical Correlation Guidelines here: https://cumming.ucalgary.ca/mdprogram/about/governance/policies Course specific learning objectives for Clinical Core in the setting of this course can be found in the course documents.

Clinical Correlation Rules of Conduct
Students and preceptors will not be used as patients for clinical correlation sessions. This means that students will not examine the preceptor, the preceptor will not examine the students

and students will not examine one another.

UME Policies, Guidelines, Forms, & TORs
Please refer to the MD program website https://cumming.ucalgary.ca/mdprogram/about/governance

Reappraisals and Appeals
Please refer to the CSM Reappraisal of Graded Term Work and Academic Assessments and CSM UME Academic Assessment and Graded Term Work Procedures for details regarding reappraisals and appeals https://cumming.ucalgary.ca/mdprogram/about/governance/policies Please note by policy and terms of reference if you plan to request a reappraisal of the result(s) of this exam/course, a formal reappraisal request in writing needs to be submitted to md.reappraisals@ucalgary.ca within 10 days of receiving the result. If the student disagrees with the decision of the UME Student Evaluation Committee, the student may appeal that decision to the UME University Faculty Appeals Committee. Please refer to the CSM UME Academic Assessment and Graded Term Work Procedures for procedure for appeals. https://cumming.ucalgary.ca/mdprogram/about/governance

Academic Accommodation
Students needing an accommodation because of a disability or medical condition should contact Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities available https://live-ucalgary.ucalgary.ca/student-services/access. Student Accessibility Services, please contact their office at (403) 220-8237, visit: MacEwan Student Centre room 452 or email: access@ucalgary.ca. Students who have not registered with the Student Accessibility Services are not eligible for formal academic accommodation.

Accommodations on Protected Grounds Other Than Disability
Students who require an accommodation in relation to their coursework or to fulfil requirements for a graduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to the appropriate Assistant or Associate Dean Students who require an accommodation unrelated to their coursework, based on a protected ground other than disability, should communicate this need, preferably in writing, to the Vice-Provost (Student Experience). For additional information on support services and accommodations for students with disabilities, visit https://live-ucalgary.ucalgary.ca/student-services/access

Academic Integrity
The University of Calgary is committed to the highest standards of academic integrity and

honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect.

It is expected that all work submitted in assignments should be the student's own work, written expressly by the student for this particular course. Students are referred to the section on academic integrity in the University Calendar (https://www.ucalgary.ca/pubs/calendar/current/k-3.html) and are reminded that plagiarism is an extremely serious academic offence.

Student Misconduct

A single offence of cheating, plagiarism, or other academic misconduct, on term work, tests, or final examinations, etc., may lead to disciplinary probation or a student's suspension or expulsion from the faculty by the Dean, if it is determined that the offence warrants such action. A student is defined as any person registered at the University for credit or non-credit courses.

Freedom of Information and Protection of Privacy

The Freedom of Information and Protection of Privacy (FOIP) Act indicates that assignments given by you to your course instructor will remain confidential, unless otherwise stated, before submission. The assignment cannot be returned to anyone else without your express permission. Similarly, any information about yourself that you share with your course instructor will not be given to anyone else without your permission.

Emergency Evacuations and Assembly Points

Assembly points for emergencies have been identified across campus. The primary assembly point for the Health Sciences Centre (HSC) building is HRIC - Atrium. For more information, see the University of Calgary's Emergency Management website: https://www.ucalgary.ca/risk/emergency-management/evac-drills-assembly-points/assembly-points

Emergency Evacuation Procedures - https://www.ucalgary.ca/risk/emergency-management/plans-and-procedures. In the case of an emergency during exam, immediately stop writing the examination and follow the direction of the invigilator and go to the nearest exit. Students should not gather personal belongings.

Internet and electronic device information and responsible use:

Students are welcome to use laptops and other electronic note-taking devices in this course unless otherwise stated. Please be considerate of others when using these devices.

Supports for student learning, success, and safety

Student Advocacy & Wellness Hub (SAWH): https://cumming.ucalgary.ca/student-advocacy-wellness-hub/home

AMA Physician and Family Support Program: https://www.albertadoctors.org/services/physicians/pfsp

Student Union Wellness Centre: https://www.ucalgary.ca/wellnesscentre/

Safewalk: http://www.ucalgary.ca/security/safewalk

Campus security - call (403) 220-5333

Student Success Centre: https://www.ucalgary.ca/ssc/

Library Resources: http://library.ucalgary.ca/

Student Union (https://www.su.ucalgary.ca/about/who-we-are/elected-officials/) or Graduate Student's Association (https://gsa.ucalgary.ca/about-the-gsa/gsa-executive-board/) representative contact information

Student Ombudsman: http://www.ucalgary.ca/ombuds/role

Copyright

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (https://www.ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-material-protected-copyright-policy) and requirements of the copyright act (https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html) to ensure they are aware of the consequences of unauthorized sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy.

Wellness and Mental Health Resources

The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness, and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the excellent mental health resources available throughout the University community such as counselling, self-help resources, peer support, or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, https://www.ucalgary.ca/wellnesscentre/services/mental-health-services) and the Campus Mental Health Strategy website (http://www.ucalgary.ca/mentalhealth).

Research Ethics

If a student is interested in undertaking an assignment that will involve collecting information from members of the public, he or she should speak with the Assistant Dean, Research (UME) and consult the CHREB ethics website (https://ucalgary.ca/research/researchers/ethics-compliance/chreb) before beginning the assignment.

ATSSL Guidelines

Please refer to the ATSSL Web Lab PPE Requirement:

http://www.ucalgary.ca/mdprogram/about-us/ume-policies-guidelines-forms-terms-reference