Provincial Child & Adolescent (≤18 years of age) Ovarian Cyst Primary Care Clinical Pathway

Background: There are many types of ovarian cysts that can occur in pediatric populations. There are two possible points of entry for this clinical pathway: **A.** Patient may present with clinical symptoms, or **B.** Cyst may be an incidental finding during pelvic imaging or exam.

Information about use of the pathway and nuances in referral processes can be found in the Introduction link above.

Entry Point A: Clinical Presentation

1. History
- Abdominal/pelvic pain
- Sexual history
- Menstrual history: Has patient started menstruating?

2. Assessment
- Vitals
- Abdominal exam

Entry Point B: Incidental Finding

Ovarian cysts in children and adolescents are typically asymptomatic and can be an incidental finding during pelvic imaging or abdominal exam (or pelvic exam-not typically indicated in this age group).
- Ultrasound report with description of cyst and size.

Proceed to #6: Management

3. Red Flags

Signs of ovarian torsion:
- Sudden onset of abdominal pain with **nausea and/or vomiting**
- Rebound or guarding

If any present → Send patient to nearest ER with ultrasound capability.
- Ultrasound will be done to look for variation in size of ovaries and to assess for absent doppler flow to ovary to assess for ovarian torsion. See Red Flags:Ovarian Torsion link above for details.

If not present ↓

4. Investigations

- Order pelvic ultrasound (not transvaginal)
  - Ultrasound report with description of cyst and size
- CBC
- Postmenarchal: Do urine HCG & consider first catch urine for STI testing

5. Red Flags

- All premenarchal
- Postmenarchal:
  - Large abdominal mass palpable on examination, confirmed to be ovarian by ultrasound
  - Complex cystic with areas of solid and cystic, and solid masses present risk for malignancy

If present → Refer **urgently** to Pediatric and Adolescent Gynecology (PAG) on call in Calgary Zone, Gynecologist/ Pediatric surgeon on call in Edmonton Zone or local equivalent. See referral guideline tab for details.

Positive tumor markers ↑

6. Management of non-palpable mass in postmenarchal populations

Simple cyst ≤ 10 cm **OR** Complex cyst ≤ 5 cm
- Typically asymptomatic
- Pain relieved with OTC medications
- Provide education and reassurance

Simple cyst > 10 cm **OR** Complex cyst > 5 cm
- Minimal pain or asymptomatic
- Order tumor markers (LDH, αFP, BHCG, Ca125) if the cyst is complex or solid as these present the greatest risk of malignancy

Discuss symptoms of ovarian torsion (sudden onset, intermittent, unilateral pain associated with nausea and vomiting). If symptoms of torsion develop, direct to visit ER.

Repeat ultrasound in 6-8 weeks
- If asymptomatic, simple cyst and ≤ 5 cm, may not require repeat imaging.

Normal ultrasound: Functional cyst

Cyst unchanged or increased in size → Refer to Pediatric and Adolescent Gynecology (PAG) or gynecology clinic. See referral guideline tab for details.

Negative tumor markers ↓