

## Obstetrics and Gynecology course

1. A 33-year-old primigravid nullipara woman comes to your office for her initial prenatal visit. She tested positive with two home pregnancy tests and has been experiencing breast tenderness and mild nausea for a few weeks. Her medical, family, and social history is unremarkable. She has a history of regular menstrual periods occurring every 28 to 30 days. She is certain that the first day of her LMP was December 2, last year. This was a planned pregnancy and is the first child for her and for her partner.

1. Make a diagnosis
2. Estimate gestational age and her date of delivery
3. Describe initial and routine patient evaluation during her prenatal visits.
4. What risk factors for pregnancy and labor she has?
5. Describe prenatal assessment of the fetus.

2. A 35-year-old multigravid nullipara G3P0020 woman presents to the hospital with vaginal bleeding and abdominal pain. She appears pale and states that she feels light-headed when sitting up or standing. She reports that she is currently about 9 weeks pregnant. On arrival, her temperature is 37°C, BP is 86/50, pulse rate is 110 beats per minute, and respiratory rate is 18 breaths per minute. Abdominal examination reveals a rigid abdomen with rebound tenderness to palpation. Pelvic examination reveals a small amount of vaginal bleeding, a 6-week-size uterus, and fullness at the right adnexa. A urine  $\beta$ -hCG confirms that she is pregnant.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

3. A 34-year-old multigravid nullipara G3P0020 woman presents to the office at 8 weeks' gestation for her first prenatal visit. This is a planned and desired pregnancy. Her obstetric history is significant for one prior elective termination and one SAB. It took her and her partner just over 1 year to conceive this pregnancy. She is afebrile, normotensive with a normal pulse. Pelvic examination reveals a 7- to 8-week-sized uterus with normal adnexa. Her cervix is closed and there is no vaginal bleeding. An office ultrasound is performed and an IUP is seen with a crown-rump length consistent with 7 weeks and 2 days gestation. Unfortunately, no fetal heartbeat is seen.

1. What is your diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

4. A 34-year-old multigravid nullipara G3P0020 woman presents to the emergency department with heavy vaginal bleeding. Her obstetric history is significant for one prior elective termination and one SAB. The previous day morning she presented to the OBGYN office at 8 weeks' gestation for her first prenatal visit. An office ultrasound is performed and an IUP is seen with a crown-rump length consistent with 7 weeks and 2 days gestation. Unfortunately, no fetal heart beat is seen. She took mifepristone in the office with the plan to take misoprostol the next day. Her vital signs are as follows: temperature, 37°C; BP, 90/52; pulse rate, 100 beats per minute; respirations, 16 breaths per minute; and 100% oxygen saturation on room air. Pelvic examination reveals active bleeding from an open cervical os. Pelvic ultrasound reveals partial retention of fetal products.

1. What is your diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

5. An 18-year-old woman arrives to the emergency department via ambulance. EMS reports that she was found seizing in a local drug store approximately 10 minutes ago. She appears to be 7 to 8 months pregnant. She had no family or friends with her, but police have contacted family who are on the way to the emergency department. Here, vital signs on arrival are as follows: BP, 180/116 mm Hg; heart rate, 76 beats per minute; respiratory rate, 16 beats per minute; oxygen saturation, 98%. Her pants are soiled, and she is not responding to questions at this time. Bedside ultrasound demonstrates fetal cardiac activity in the 130s. Quick bedside biometry estimates gestation age to be 32 weeks 1 day.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

6. A 22-year-old primigravid nullipara G1P0 woman at 36 weeks by LMP consistent with 12-week ultrasound with limited prenatal care presents via ambulance to the labor and delivery triage unit complaining of severe abdominal pain and profuse vaginal bleeding. The patient is unstable and unable to communicate coherently. EMS reports that initially her BP was 180/100 mm Hg and pulse rate was 110 beats per minute, but she has lost at least 500 mL blood in route. On the examination, her BP is 90/50 mm Hg, pulse rate is 120 beats per minute, she appears to be in significant pain, is unable to answer questions, and her abdomen feels rigid.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

7. A 29-year-old multigravid multipara G3P1102 woman at 29 weeks 3 days presents to labor and delivery triage for evaluation of abdominal pain. Her pain started 2 hours ago and comes and goes every 5 minutes. She denies any leaking fluid, change in vaginal discharge, or vaginal bleeding. Her baby has been active. Her pregnancy is complicated by a history of a urinary tract infection at 10 weeks with group B streptococcus (GBS) and a history of preterm birth at 31 weeks with her last child. She is currently taking progesterone injections weekly and a prenatal vitamin. On vaginal examination, her cervix is closed, 25% effaced, and -3 station. Uterine contractions are noted every 4 to 5 minutes with a category 1 tracing. A fetal fibronectin test returns positive. Repeat examination after 1 hour shows dilation of 1 cm, 50% effacement, and -2 station.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

8. A 26-year-old primigravid nullipara G1P0 woman presents for a prenatal visit at 34 weeks' gestation. She complains of some mild nausea and vomiting over the past 3 days. She has no headache and no visual changes. Her BP is 162/98 mm Hg. On examination, she has lower extremity pitting edema. A urinalysis dip has +1 protein.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

9. A 36-year-old multigravid multipara G7P50015 woman has just delivered a 4,500 g female infant at 39 weeks gestation. She underwent induction of labor with oxytocin for severe preeclampsia

diagnosed with systolic BPs elevated to 160 mm Hg. Her pregnancy was complicated by uncontrolled gestational diabetes and resultant polyhydramnios. She was placed on magnesium throughout her induction for seizure prophylaxis. She had an epidural placed during the first stage of labor and remained on a normal labor curve throughout. Her second stage of labor lasted 3 1/2 hours; she was, however, able to deliver vaginally with preemptive McRoberts maneuvers and steady traction. The third stage of labor lasted 10 minutes, and the placenta was delivered intact. Immediately after the third stage, her bleeding was significant with the expulsion of blood clots and a fundus that was notable for boggy.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this complication.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

10. A 38-year-old woman presents to a clinic complaining of heavier menstrual flow for the past year. This is accompanied by a sensation of fullness in the pelvis, but no significant pain. She is a primigravid primipara and does not use oral contraceptives as her husband had a vasectomy several years ago. She is monogamous. No history of STDs. Her first menses was at age 10 and she has regular 28-day cycles. Her medical history is significant for hypothyroidism for which she is managed with Synthroid. Her BMI is 31.2 and she is presently on a diet and exercise program. She says, "I'm trying to lose weight, but I've always been a bit bigger." There is no remarkable family history. Pelvic exam reveals an irregularly enlarged, nontender uterus with palpable firm nodularity.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

11. A 28-year-old woman presents to your clinic complaining of cyclical pelvic pain for the past year. She says that it has remained constant (+4/10 by Pain Scale Chart) but seems to get predictably worse in the days leading up to her period. She denies any pain on urination and has only had two bladder infections in her life. Past medical history is unremarkable, no STDs. No significant family history. No surgeries. No current meds. Denies drinking, smoking, or drugs. She is monogamous with her fiancé and says that occasionally she has some mild discomfort during sex. She has never been pregnant as far as she knows but is considering pregnancy after she gets married next spring. Her cycles are regular q 26-28 days. Abdomen soft, non-tender, non-distended. Mild pelvic pain on palpation. Vulva and vagina are normal. Speculum exam is unremarkable. Bimanual exam reveals uterosacral nodularity, adnexal tenderness; uterus is retroverted. No masses.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

12. A 41-year-old female presents to a gynecologist for a routine healthcare visit. She has no complaints except for some mild lower abdominal bloating. Her past medical and surgical history is unremarkable. Her sister has recently been diagnosed with endometriosis. She and her husband have been trying to conceive for the past 2 years and have been unsuccessful. She is requesting a referral to an infertility specialist. On exam, she is thin and in no distress. Pelvic exam reveals 10 cm bilateral adnexal masses indistinguishable from the uterus. Transvaginal ultrasound performed in the office is significant for ovarian masses with homogeneous, low-level internal echoes.

1. What is the most likely diagnosis?

2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

13. A 32-year-old woman presents to a clinic complaining of spotting between menstrual cycles. This has been going on for about 3 months, and there is no apparent pattern to when the spotting happens. She does, however, mention that she thinks it is worse after she has intercourse. She is a primigravid primipara and has no history of STI. Her menstrual cycles occur regularly in 28-day intervals and she has an “average” flow (she says she uses about 5 or 6 pads per cycle). She is monogamous with her boyfriend of 3 years. Her most recent Pap smear was last year and was unremarkable. Speculum examination reveals a cherry-red growth extending from the internal cervix into the vaginal canal. On manual examination, it is appreciated as a mobile mass of approximately 1-cm diameter.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

14. A 65-year-old woman with class III obesity (BMI 41) with hypertension and diabetes presents with postmenopausal vaginal bleeding, 12 years after menopause. She has never been pregnant. She has a first-degree relative and a second-degree relative who have had endometrial cancer. Bleeding is scant but has persisted for more than 1 month. She has not recently used hormone replacement therapy and she had a normal Pap smear 6 months previously. Vaginal examination reveals evidence of recent bleeding.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.

3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

15. A 34-year-old woman presents to a clinic complaining of dull pelvic pain over the past 4 days (+3/10). Her menstrual cycles are regular, 28 day intervals. She is a nulligravid. No significant medical history, including no STDs. She does not take any kind of contraception. She is not on any kind of medications. She smokes (for 16 years 1 pack daily). She denies dysuria. Vital signs are within normal limits. On physical exam there is no costovertebral angle tenderness. Pelvic exam is significant for a freely-mobile, smooth left adnexal mass; no bleeding or cervical motion tenderness. The remainder of the physical exam is unremarkable.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

16. An 18-year-old nulligravid woman presents to the student health clinic with a 4-week history of yellow vaginal discharge. She also reports vulvar itching and irritation. She is sexually active and monogamous with her boyfriend. They use condoms inconsistently. On physical examination, she is found to be nontoxic and afebrile. On genitourinary examination, vulvar and vaginal erythema is noted along with a yellow, frothy, malodorous discharge with a pH of 6.5. The cervix appears to have erythematous punctuations. There is no cervical, uterine, or adnexal tenderness. The addition of 10% KOH to the vaginal discharge does not produce an amine odor.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation

4. Management and treatment
5. Risk factors and prevention

17. A 36-year-old G2P2 woman presents to her gynecologist with a 3-week history of vaginal irritation and fish-smelling vaginal discharge. She recently tried an over-the-counter antifungal treatment without any improvement in her symptoms. She is sexually active in a monogamous relationship with a male partner of 5 years, and she uses a contraceptive ring (NuvaRing). Genitourinary examination shows a thin white discharge. The remainder of her examination is normal. Microscopic evaluation of the vaginal secretions reveals decreased lactobacilli, a few WBCs, and 40% of the vaginal epithelial cells have a specific appearance stippled with the tiny gram-variable flora.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

18. A 28-year-old G1P1 presents to the emergency department 4 days after primary cesarean section with complaints of fever, malaise, and increased lower abdominal pain for the last 6 hours. Her labor course was complicated by prolonged rupture of membranes and stage 2 arrest because of cephalopelvic disproportion resulting in a cesarean delivery. Her postoperative course was uncomplicated, and she had been discharged home stable the day prior to presentation. Her temperature is 38.1°C (100.6°F), pulse rate is 102/min, respirations are 20/min, and BP is 110/70 mm Hg. Abdominal examination shows fundal tenderness. The incision is intact without erythema, warmth, or discharge. On pelvic examination, there is foul-smelling lochia. Her WBC count is 17,000 cells/ $\mu$ L, and there are 15% bands.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.

3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

19. A 20-year-old nulligravid young woman presents to the emergency department 4 hours after the onset of nausea, vomiting, and moderate lower abdominal pain. Her last menstrual period was 2 weeks ago. She reports three new sexual partners in the last 6 months and uses condoms intermittently. She denies any history of sexually transmitted infections (STIs). Her temperature is 38.0°C (100.4°F), pulse rate is 96/min, respirations are 20/min, and BP is 110/60 mm Hg. Examination shows a soft abdomen and lower quadrant tenderness without guarding or rebound. On pelvic examination, there is a mucopurulent cervical discharge, moderate cervical motion tenderness, uterine, and bilateral adnexa tenderness without enlargement.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

20. A 27-year-old nulligravid woman presents to your office with a history of amenorrhea. She has a history of infrequent menstrual cycles in high school but she had regular withdrawal bleeds in college and medical school while on oral contraceptive pills. She stopped her birth control pills about 7 months ago and her period never resumed and she developed mild hirsutism along with a 4,5 kg (10 lbs) weight gain. She is sexually active with a male partner and uses condoms for contraception. She has a history of seasonal allergies, no prior surgeries, and no prior pregnancies.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.

3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

21. A 33-year-old multigravida multipara G3 P1011 attends the antenatal clinic. Her medical history is remarkable for diabetes mellitus. She has been on antidiabetic drugs. Gestational age is 12 weeks. Her BP – 100/60 mm Hg, pulse rate – 78 bpm. CBC: hemoglobin 125 g/l, erythrocytes 3,800,000 cells/ $\mu$ L, leukocytes 8,900 cells/ $\mu$ L, platelets 280,000 cells/ $\mu$ L, ESR – 14 mm/h. Urinalysis: protein – negative, sugar – 3.5 mmol/l, ketone – slightly positive, squamous epithelium 2-4 cells per high power field, leukocytes - 2-3 cells per high power field, erythrocytes – 1-2 cells per high power field. Fasting Blood Sugar Test – 7.4 mmol/l. Glucose tolerance test: fasting blood sugar level – 6.8 mmol/l with 1-hour postprandial value – 8.4 mmol/l, 2-hour postprandial value – 7.4 mmol/l. Hemoglobin A1C is 7.5%.

1. What is the most likely diagnosis?
2. What influence does this pathology have on pregnancy and labor?
3. Management and treatment
4. What the diet should be recommended?
5. Postpartum rehabilitation and follow-up in this pathology

22. A 25-year-old multigravida multipara G4P1021 has been attending an antenatal clinic since 11 weeks of pregnancy. Her blood type 0(I) Rh-negative. Her husband's blood type is A(II) Rh-positive. Menarche at 13 years, her menses are regular, every 28 days for 5 days, with average blood loss, painless. Her last menstrual period was five months ago. She has monogamous sexual relationship since the age of 20. Her pregnancies outcome: the first - termed uncomplicated delivery, the second one – induced elective abortion, the third one - early spontaneous miscarriage. On physical examination she is normotensive, in no distress. The fundal height corresponds to 24 weeks of pregnancy. The abdomen was non tender, no rebound. On

palpation the uterus is normal, painless, she feels the fetal movement well, bedside ultrasound demonstrates fetal heart rate of 154. Fetus ultrasound revealed generalized swelling, increased size of the liver and spleen, placental thickening.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis
3. Diagnostic evaluation to confirm the diagnosis
4. What influence does this pathology have on fetus development?
5. Management, treatment, and prevention.

23. A 22-year-old nulligravid woman presents to a clinic complaining of unpredictable menstrual cycles. She has only five menses per year, which has been the case since menarche on 11-year-old. She is also concerned about excessive facial hair growth. On her last annual checkup, she was found to have hyperlipidemia.

On physical examination you note terminal hair growth on above the upper lip, sideburns, neck, and abdominal midline. There is some facial acne. She is overweight; BMI 29.2. The rest of the physical exam is unremarkable. Bimanual pelvic exam revealed slightly enlarged ovaries without any other markable changes.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

24. A 27-year-old pregnant woman was taken by an ambulance to an obstetric hospital. Her gestational age was 36 weeks. She complained of headache, visual disturbances, nausea. In the emergency room, small fibrillary twitches of facial muscles appeared, then tonic contractions of all skeletal muscles, respiratory arrest, loss of consciousness. After 20-25 seconds, clonic seizures occurred, and foam was secreted from the mouth. The patient's examination revealed

edema of the face, hands, and feet. BP – 180/120 mm Hg. Pulse rate – 110 bpm.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

25. A 32-year-old G2P1 woman was admitted to the labor and delivery unit at 39-40 weeks' gestation with regular contractions occurring every 1.5-2 minutes. Her contractions last for 40 seconds, medium strength turning into pushing. The labor began 6 hours ago. The membrane ruptured two hours ago. Amniotic fluid is normal. Her last pregnancy ended with a normal spontaneous vaginal delivery. The fetal lie is longitudinal with vertex presentation, the fetal head is in the pelvic inlet. Fetal heartbeat is clear, rhythmic, 136 beats per minute. On vaginal examination the cervix is 100% effaced, fully dilated, the fetal membrane is absent, the head is presenting in the pelvic inlet. The root of the nose, orbital ridge, forehead with frontal suture, anterior angle of the anterior fontanelle are detected.

1. What is the most likely diagnosis?
2. Which complications can occur in such case?
3. Classification of this pathology
4. What influence does this pathology have on fetus
5. Management of labor.

26. A 35-year-old primigravid nullipara woman comes to antenatal clinic for her initial prenatal visit. She has two positive home pregnancy tests and has been noticing mild nausea and breast tenderness for several days. Her family, social, and medical history is unremarkable. Her menstrual periods are regular, with 28 to 30 days intervals. The first day of her last menstrual period was November 28,

last year.

1. Make a diagnosis
2. Estimate gestational age and her date of delivery
3. Describe initial and routine patient evaluation during her prenatal visits.
4. What risk factors for pregnancy and labor she has?
5. Describe prenatal assessment of the fetus.

27. A 37-year-old multigravid nullipara G4P0030 woman was taken by an ambulance to the emergency room complaining of vaginal bleeding and abdominal pain. She appears pale and states that she feels light-headed when sitting up or standing. She reports that she is currently about 8 weeks pregnant. On arrival, her temperature is 36.9°C, BP is 84/45, pulse rate is 112 beats per minute, and respiratory rate is 20 breaths per minute. Abdominal examination revealed a rigid abdomen with rebound tenderness to palpation. Pelvic examination revealed a small amount of vaginal bleeding, a 5-week-size uterus; tenderness at the right adnexa which is slightly enlarged. A urine  $\beta$ -hCG is positive.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

28. A 29-year-old multigravid nullipara G4P0030 woman presents to an antenatal clinic at 9 weeks' pregnancy for her first prenatal visit. This is a planned and desired pregnancy. Her obstetric history is significant for one prior elective termination and two spontaneous abortions. It took her and her partner about 1.5 year to conceive this pregnancy. Her temperature is 36.7°C, BP is 115/75, pulse rate is 72 beats per minute. Pelvic examination reveals an 8- to 9-week-sized uterus with normal adnexa. Her cervix is closed and there is no

bleeding. On transvaginal sonography a gestational sack is seen with a fetus which crown–rump length consistent with 8 weeks and 2 days gestation. Unfortunately, no fetal cardiac activity is seen.

1. What is your diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

29. A 32-year-old multigravid nullipara G4P0030 woman was taken by an ambulance to the emergency department with heavy vaginal bleeding. Her obstetric history is significant for one prior elective termination and two spontaneous abortions. The previous day morning she presented to the gynecologist's office at 7 weeks' gestation for her first prenatal visit. On transvaginal sonography a gestational sack is seen with a fetus which crown–rump length consistent with 8 weeks and 2 days gestation. Unfortunately, no fetal cardiac activity is seen. She was prescribed mifepristone to be taken at once in the office and misoprostol for the next day. In the evening she noticed small amount of vaginal bleeding. Today in the morning her bleeding became much heavier, she felt light-headed and called the ambulance. On arrival her temperature is 37°C; BP 85/50; pulse rate 110 beats per minute; respirations 18 breaths per minute; and oxygen saturation 100%. Pelvic examination revealed profuse bleeding from an open cervical os. On transvaginal sonography enlarged uterus, extended uterine cavity with partial retention of fetal products have been revealed.

1. What is your diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

30. An 20-year-old was taken by an ambulance to the emergency

department. The accompanying paramedic reports that she was found seizing in a street approximately 10 minutes ago. She appears to be 8 to 9 months pregnant. She was alone in the street, but police are trying to find and contact some relatives. On arrival her BP 190/120 mm Hg; heart rate 74 beats per minute; respiratory rate 18 breaths per minute; oxygen saturation 98% on room air. She is currently unconscious and not responding to questions. The sonographic investigation estimates gestation age to be 33 weeks 3 days, fetal cardiac activity is visualized at 130 beats per minute.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

31. A 24-year-old primigravid nullipara woman was taken by an ambulance to the labor and delivery triage unit complaining of severe abdominal pain and profuse vaginal bleeding. Her most likely gestational age is 36 weeks by LMP and by the report of first trimester ultrasound. The accompanying paramedic reports that her BP was 190/110 mm Hg and pulse rate was 110 beats per minute, but she has lost at least 500 mL blood in route. At the emergency room, her BP is 80/40 mm Hg, pulse rate is 125 beats per minute. She is unable to communicate coherently but appears to be in significant pain, and her abdomen feels rigid. Bedside ultrasound demonstrates no fetal cardiac.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

32. A 31-year-old multigravid multipara G4P1112 woman at 31 weeks 2 days presents to labor and delivery triage complaining of abdominal

pain. It started about 3 hours ago and comes and goes every 5 minutes. She denies any leaking fluid, change in vaginal discharge, or vaginal bleeding. She feels her baby's movements. She has a history of a urinary tract infection at first trimester, a history of preterm birth at 31 weeks with her last child, and one prior elective termination. She is currently taking no medicines. On vaginal examination, her cervix is closed, 25% effaced, and -3 station. Uterine contractions are noted every 4 to 5 minutes. A fetal fibronectin test returns positive. Repeat examination after 1 hour shows dilation of 1 cm, 50% effacement, and -2 station.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

33. A 23-year-old primigravid nullipara woman presents to an antenatal clinic at 35 weeks' pregnancy complaining of some mild nausea over the past 4 days. She has no headache and no visual changes. Her BP is 172/102 mm Hg. On examination, she has lower leg and feet swelling. A urinalysis dip has +2 protein.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

34. A 37-year-old multigravid multipara G6P40014 woman has just delivered a 4,600 g male infant at full term gestation. She got induction of labor with oxytocin for severe preeclampsia diagnosed with systolic BPs elevated to 170 mm Hg. Her pregnancy was complicated by a history of gestational diabetes and resultant polyhydramnios. She was placed on magnesium and had an epidural

placed during the first stage of labor and remained on a normal labor curve throughout. Her second stage of labor lasted 3 hours; and finished by vaginal delivery with preemptive McRoberts maneuvers and vacuum extraction. The third stage of labor lasted 10 minutes, and the placenta was delivered intact. Immediately after the third stage, significant vaginal bleeding occurred, and the expulsion of blood clots was noticed. On palpation a fundus was notable for boggy.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this complication.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

35. A 40-year-old woman presents to a clinic complaining of heavier menstrual flow for the past year. She feels additionally some fullness in the lower abdomen, but no significant pain. She has a history of one uncomplicated delivery. Currently she doesn't use any contraceptives. She has no history of STDs. Her first menses was at age 11 and she has regular 28-day cycles. Her medical history is significant for prediabetes for which she is managed with Metformin. Her BMI is 33.2 and she is presently on a diet and exercise program. But she's reached just a little success to overcome her obesity. There is no remarkable family history. Pelvic exam reveals an irregularly enlarged, nontender uterus with palpable firm nodularity.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

36. A 27-year-old woman presents to a clinic complaining of cyclical pelvic pain for the past two years. This pain has remained constant mild (3/10 by Pain Scale Chart), but it is worsening for several days

before her period. She denies any pain on urination and defecation. Her medical history is unremarkable. No STDs. No significant family history. No surgeries. No current medications. She denies any abuses and addictions. She is monogamous and says that she has some mild discomfort during sex. She has never been pregnant despite she has never used any kind of contraception. She says that this is not a concern for her because she is planning to get pregnant after she gets married next spring. Her menstrual cycles occur regularly in 26-28 days intervals. Abdomen is soft, non-tender, non-distended. Physical examination reveals mild pelvic pain on palpation. Speculum examination is unremarkable. On bimanual examination uterus is retroverted; adnexal tenderness and bilateral uterosacral nodularity are noticed. No masses.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

37. A 43-year-old female presents to a gynecologist for an annual check-up. She has noticed some mild lower abdominal bloating for several months on. Her past medical and surgical history is unremarkable. She and her husband have been unsuccessfully trying to conceive for the past 2.5 years. She is considering a visit to an infertility specialist. Her sister has a history of endometriosis. On exam, her vital signs are within normal limits. Her BMI is 18.5. Pelvic exam is significant for 9 cm bilateral adnexal masses indistinguishable from the uterus. Transvaginal sonography revealed ovarian masses with homogeneous, low-level internal echoes.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

38. A 36-year-old woman presents to a clinic complaining of intermenstrual spotting that has been noticed for about 3 months on, and it is unpredictable when the spotting happens. But she thinks it is worse after she has intercourse. She is a primigravid primipara and has no history of STI. Her menstrual cycles are regular every 26-28 days, she uses about 5 or 6 pads per cycle. She is monogamous and has occasional intercourses. Her most recent Pap smear was last year and was unremarkable. Speculum examination is significant for a cherry-red growth protruding from the external cervical os into the vaginal canal. On manual examination, it is appreciated as a mobile mass of approximately 12-mm diameter.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

39. A 67-year-old woman with class III obesity (BMI 42) with diabetes and hypertension presents to a clinic complaining of vaginal bleeding. She is 12 years after menopause. She has never been pregnant. Bleeding is rather spotting but has lasted for more than 2 months. She had a normal Pap smear 8 months previously. She has not ever used hormone therapy for menopausal syndrome. Speculum examination reveals evidence of recent bleeding. Bimanual examination is unremarkable.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

40. A 32-year-old nulligravid woman presents to a clinic with mild

pelvic pain over the past 5 days (3/10 by Pain Scale Chart). Her periods occur regularly in 26-28 days intervals. No significant medical history, including no STDs. She does not use any kind of contraception nor any kind of medications. She smokes for about a decade. On physical examination she is in no distress. She denies dysuria. There is no costovertebral angle tenderness. Pelvic exam is significant for a freely mobile, smooth left adnexal mass of 10-cm diameter, no bleeding or cervical motion tenderness. The remainder of the physical exam is unremarkable.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

41. An 22-year-old nulligravid woman presents to a clinic complaining of yellow vaginal discharge. It comes and goes for about 3-week. She also noticed vulvar itching and irritation. She is sexually active and monogamous with her boyfriend. They use condoms intermittently. On physical examination, her temperature is 36.7°C . On pelvic examination, vulvar and vaginal erythema is noted along with a yellow, frothy, malodorous discharge. On speculum examination is significant for erythematous punctuations on the surface of the cervix. Bimanual examination didn't reveal any cervical, uterine, or adnexal tenderness. Vaginal discharge pH is 6.0. The remainder of Amsel criteria appeared to be negative.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

42. A 35-year-old multigravida multipara woman presents to her

gynecologist complaining of vaginal irritation and fish-smelling vaginal discharge for about 2 weeks. She tried antifungal treatment without prescription but didn't succeed with her symptoms. She is sexually active and monogamous with a male partner for 5 years, and she uses oral contraceptive pills for consecutive 3 years. Speculum examination reveals a thin white discharge. The remainder of her examination is unremarkable. Microscopic evaluation of the vaginal smears reveals decreased lactobacilli, a few leucocytes, and 50% of the vaginal epithelial cells have a specific speckled appearance being coated with the tiny gram-variable flora.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

43. A 26-year-old G1P1 arrives to the emergency department via ambulance 5 days after primary cesarean section and 2 days after she had been discharged home. She complains of fever, malaise, and increased lower abdominal pain for the last 4 hours. Her labor was complicated by prolonged rupture of membranes and failure to progress in 2nd stage of labor because of cephalopelvic disproportion that became an indication for a cesarean delivery. Her postoperative course was uneventful, and she had been discharged home stable two days prior to presentation. On arrival, her temperature is 38.5°C, BP is 115/75, pulse rate is 108 beats per minute, and respiratory rate is 18 breaths per minute. Abdominal examination reveals fundal tenderness. The incision is intact without erythema, warmth, or discharge. On speculum examination, foul-smelling lochia from an open cervical os. Her total leucocytes count is 18,000 cells/ $\mu$ L with left shift of 15% band cells count.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.

3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

44. An 18-year-old nulligravid young woman arrives to the emergency department via ambulance complaining moderate lower abdominal pain that occurred 3 hours ago. Her last menstrual period was 3 weeks ago. She has several sexual partners and uses condoms inconsistently. She denies any previous history of sexually transmitted infections. On arrival, her temperature is 38.5°C, BP is 115/75, pulse rate is 108 beats per minute, and respiratory rate is 18 breaths per minute. Physical examination reveals a non-distended, soft abdomen. Palpation is significant for lower quadrant tenderness without guarding or rebound. On pelvic examination, there is a mucopurulent cervical discharge, uterine is not enlarged nor tender. The remainder of bimanual examination shows moderate cervical motion tenderness, and bilateral adnexa tenderness with slightly enlargement.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention

45. A 25-year-old woman presents to a gynecologist with a complaint of amenorrhea. Her menstrual cycles have been infrequent since high school, but she had regular withdrawal bleeds while on oral contraceptive pills. She ceased her birth control pills about 9 months ago and her menses never resumed, and she developed mild hirsutism along with a 4,5 kg weight gain. She has monogamous relationship with a male partner and currently doesn't use any kind of contraception. She hasn't been pregnant, but she is considering to conceive as soon as possible. She has no prior surgeries. Bimanual pelvic exam revealed slightly enlarged ovaries without any other markable changes. Transvaginal sonography shows polycystic pattern

with 12 small follicles between 3 and 6 mm in diameter in both ovaries.

1. What is the most likely diagnosis?
2. Etiology and pathogenesis of this disease.
3. Diagnostic evaluation
4. Management and treatment
5. Risk factors and prevention