Answer paper

Examination: MEDSEM9_V15_ORD

Assessment: MEDSEM9_STASJON16_V15_ORD

Part 1:

Question 1:

Which of the following signs are typical for acute bronchiolitis?

Audible expiratory wheeze [pull-down menu]
Chest recessions (norsk: Inndragninger) [pull-down menu]
Inspiratory dyspnoea [pull-down menu]
Expiratory dyspnoea [pull-down menu]
Barking cough (norsk: Bjeffende hoste) [pull-down menu]
Percussion of thorax: Dull (norsk: Dempning) [pull-down menu]
On auscultation: Ronchi, sibilating rhonchi (norsk: Pipelyder) [pull-down menu]
On auscultation: Crepitations, rales (norsk: Knattrelyder) [pull-down menu]

Answer:

Audible expiratory wheeze = **Yes**
Chest recessions (norsk Inndragninger) = **Yes**
Inspiratory dyspnoea = **No**
Expiratory dyspnoea = **Yes**
Barking cough (norsk Bjeffende hoste) = **No**
Percussion of thorax Dull (norsk Dempning) = **No**
On auscultation Ronchi, sibilating rhonchi (norsk Pipelyder) = **Yes**
On auscultation Crepitations, rales (norsk Knattrelyder) = **Yes**

Part 2:

Question 1:

Which of the following symptoms are typical for acute laryngitis?

Audible expiratory wheeze [pull-down menu]
Chest recessions (norsk: Inndragninger) [pull-down menu]
Inspiratory dyspnoea [pull-down menu]
Expiratory dyspnoea [pull-down menu]
Barking cough (norsk: Bjeffende hoste) [pull-down menu]
Percussion of thorax: Dull (norsk: Dempning) [pull-down menu]
On auscultation: Ronchi, sibilating rhonchi (norsk: Pipelyder) [pull-down menu]
On auscultation: Crepitations, rales (norsk: Knattrelyder) [pull-down menu]

Answer:

Audible expiratory wheeze = **No**
Chest recessions (norsk Inndragninger) = **Yes**
Inspiratory dyspnoea = **Yes**
Expiratory dyspnoea = **No**
Barking cough (norsk Bjeffende hoste) = **Yes**
Percussion of thorax Dull (norsk

Dempning) = **No**
On auscultation
Ronchi, sibilating rhonchi (norsk
Pipelyder) = **No**
On auscultation
Crepitations, rales (norsk
Knattrelyder) = **No**

Part 3:

Question 1:

Which of the following symptoms are typical for Lobar pneumonia?

Audible expiratory wheeze [pull-down menu]
Chest recessions (norsk: Inndragninger) [pull-down menu]
Increased respiratory rate (norsk: tachypnoea) [pull-down menu]
Prolonged expiratory phase [pull-down menu]
Barking cough (norsk: Bjeffende hoste) [pull-down menu]
Percussion of thorax: Dull (norsk: Dempning) [pull-down menu]
On auscultation: Ronchi, sibilating rhonchi (norsk: Pipelyder) [pull-down menu]
On auscultation: Crepitations, rales (norsk: Knattrelyder) [pull-down menu]

Answer:

Audible expiratory wheeze = **No**
Chest recessions (norsk
Inndragninger) = **Yes**
Increased respiratory rate (norsk
tachypnoea) = **Yes**
Prolonged expiratory phase = **No**
Barking cough (norsk
Bjeffende hoste) = **No**
Percussion of thorax
Dull (norsk
Dempning) = **Yes**
On auscultation
Ronchi, sibilating rhonchi (norsk
Pipelyder) = **No**
On auscultation
Crepitations, rales (norsk
Knattrelyder) = **Yes**

Assessment: MEDSEM9_STASJON17_V15_ORD

Part 1:

Lisbeth is 32 years old and gave birth to a boy two years ago after an uncomplicated pregnancy. She is now pregnant for the second time.
The current pregnancy has been largely uncomplicated, but she comes in to the maternity ward with contractions and rupture of membranes during the 28th gestational week. Tocolytic treatment does not stop the progress, and Lisbeth gives birth to a girl six hours later.
You are being called for as resident in the pediatric ward. The birth is vaginal and occurs a few minutes after your arrival to the maternity ward. You find a girl who cries immediately, but breaths slower than you had expected. Apgar score is 6 at 1 min with minus for color, tone, response, and respiration.
Three minutes after birth, she has slow and irregular respiration at 30 per minute. You can also see that she has nasal flaring. Heart rate is 100 per minute. You find her hands and feet blue, and upon closer examination you think she is also blue on and around the lips.

Question 1:

Which 2 of the following treatments would you first initiate?

- ☐ Ventilation with bag and mask
- ☐ Blood Transfusion
- ☐ Chest compressions
- ☐ Oxygen Supplementation
- ☐ Volume bolus
- ☐ Antibiotics

Answer:

Ventilation with bag and mask
Oxygen Supplementation

Part 2:

Lisbeth is 32 years old and gave birth to a boy two years ago after an uncomplicated pregnancy. She is now pregnant for the second time.
The current pregnancy has been largely uncomplicated, but she comes in to the maternity ward with contractions and rupture of membranes during the 28th gestational week. Tocolytic treatment does not stop the progress, and Lisbeth gives birth to a girl six hours later.
You are being called for as resident in the pediatric ward. The birth is vaginal and occurs a few minutes after your arrival to the maternity ward. You find a girl who cries immediately, but breaths slower than you had expected. Apgar score is 6 at 1 min with minus for color, tone, response, and respiration.
Three minutes after birth, she has slow and irregular respiration at 30 per minute. You can also see that she has nasal flaring. Heart rate is 100 per minute. You find her hands and feet blue, and upon closer examination you think she is also blue on and around the lips.
You initiate first ventilation with bag and mask and oxygen supplementation. After 2 minutes the baby's heart rate has increased to 140 per minute, the cyanosis has improved and she breaths spontaneously at a rate of 80 per minute. You transfer her to the Neonatal Department located next door.

Question 1:

Which 3 of the following investigations do you order on arrival at the Intensive Care Unit?

- ☐ Bilirubin skin test
- ☐ Echocardiography
- ☐ Arterial blood gas
- ☐ Ultrasound of the head
- ☐ Blood sample for infection and hematology
- ☐ Urine sample (leucocytes, blood and protein)
- ☐ Chest X-ray
- ☐ Fecal blood test

Answer:

Arterial blood gas

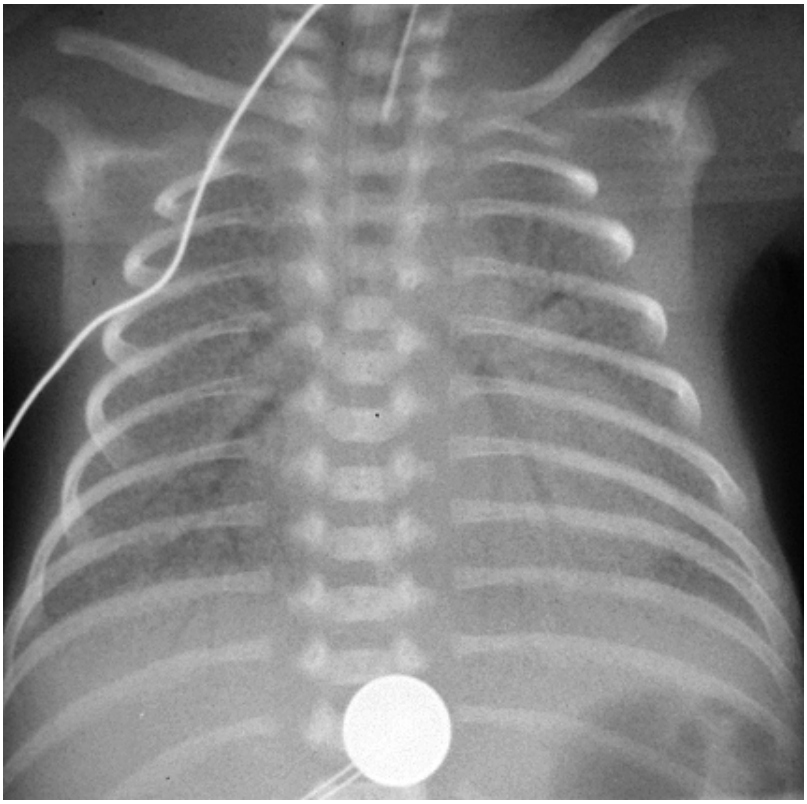
Blood sample for infection and hematology
Chest X-ray

Part 3:

Lisbeth is 32 years old and gave birth to a boy two years ago after an uncomplicated pregnancy. She is now pregnant for the second time.
The current pregnancy has been largely uncomplicated, but she comes in to the maternity ward with contractions and rupture of membranes during the 28th gestational week. Tocolytic treatment does not stop the progress, and Lisbeth gives birth to a girl six hours later.
You are being called for as resident in the pediatric ward. The birth is vaginal and occurs a few minutes after your arrival to the maternity ward. You find a girl who cries immediately, but breaths slower than you had expected. Apgar score is 6 at 1 min with minus for color, tone, response, and respiration.
Three minutes after birth, she has slow and irregular respiration at 30 per minute. You can also see that she has nasal flaring. Heart rate is 100 per minute. You find her hands and feet blue, and upon closer examination you think she is also blue on and around the lips.
You initiate first ventilation with bag and mask and oxygen supplementation. After 2 minutes the baby's heart rate has increased to 140 per minute, the cyanosis has improved and she breaths spontaneously at a rate of 80 per minute. You transfer her to the Neonatal Department located next door.
You ordered Arterial blood gas, blood sample for infection and hematology and Chest X-ray.

Question 1:

Which is the best description of the findings on Chest X-ray (see image)?



- Left sided lung collapse (pneumothorax)
- Bilateral granular opacities (fortetninger) and air bronchograms
- Situs Inversus

Answer:

Bilateral granular opacities (fortetninger) and air bronchograms

Part 4:

Lisbeth is 32 years old and gave birth to a boy two years ago after an uncomplicated pregnancy. She is now pregnant for the second time.
The current pregnancy has been largely uncomplicated, but she comes in to the maternity ward with contractions and rupture of membranes during the 28th gestational week. Tocolytic treatment does not stop the progress, and Lisbeth gives birth to a girl six hours later.
You are being called for as resident in the pediatric ward. The birth is vaginal and occurs a few minutes after your arrival to the maternity ward. You find a girl who cries immediately, but breaths slower than you had expected. Apgar score is 6 at 1 min with minus for color, tone, response, and respiration.
Three minutes after birth, she has slow and irregular respiration at 30 per minute. You can also see that she has nasal flaring. Heart rate is 100 per minute. You find her hands and feet blue, and upon closer examination you think she is also blue on and around the lips.
You initiate first ventilation with bag and mask and oxygen supplementation. After 2 minutes the baby's heart rate has increased to 140 per minute, the cyanosis has improved and she breaths spontaneously at a rate of 80 per minute.
You transfer her to the Neonatal Department located next door.
You ordered Arterial blood gas, blood sample for infection and hematology and Chest X-ray.
X-ray showed bilateral granular opacities and air bronchograms.
Her weight is 1200 grams, which corresponds approximately to 50 percentile at 28 weeks gestational age. She has a respiratory rate of 80 per minute with subcostal retractions. When you listen to her lungs, you hear expiratory grunting. Without oxygen supplementation her oxygen saturation varies between 80 and 89%, and with supplemental oxygen, the saturation in the foot rises to 96 %. The first arterial blood gas shows mild CO-retention and acidosis (PaCO2 7.5 kPa, Ph 7.25 BE -5.5 mmol/l). CRP is 18 mg/l (ref < 5) and hemoglobin is 14 g/dl (ref 12-18).

Question 1:

Please define the likelihood of the following differential diagnoses:

Pneumothorax [pull-down menu]
Lung infection/sepsis [pull-down menu]
Congenital heart defect [pull-down menu]
Respiratory distress syndrome [pull-down menu]

Answer:

Pneumothorax = **Unlikely**
Lung infection/sepsis = **Likely**
Congenital heart defect = **Unlikely**
Respiratory distress syndrome = **Likely**

Part 5:

Lisbeth is 32 years old and gave birth to a boy two years ago after an uncomplicated pregnancy. She is now pregnant for the second time.
The current pregnancy has been largely uncomplicated, but she comes in to the maternity ward with contractions and rupture of membranes during the 28th gestational week. Tocolytic treatment does not stop the progress, and Lisbeth gives birth to a girl six hours later.
You are being called for as resident in the pediatric ward. The birth is vaginal and occurs a few minutes after your arrival to the maternity ward. You find a girl who cries immediately, but breaths slower than you had expected. Apgar score is 6 at 1 min with minus for color, tone, response, and respiration.
Three minutes after birth, she has slow and irregular respiration at 30 per minute. You can also see that she has nasal flaring. Heart rate is 100 per minute. You find her hands and feet blue, and upon closer examination you think she is also blue on and around the lips.
You initiate first ventilation with bag and mask and oxygen supplementation. After 2 minutes the baby's heart rate has increased to 140 per minute, the cyanosis has improved and she breaths spontaneously at a rate of 80 per minute.
You transfer her to the Neonatal Department located next door.
You ordered Arterial blood gas, blood sample for infection and hematology and Chest X-ray.
X-ray showed bilateral granular opacities and air bronchograms.
Her weight is 1200 grams, which corresponds approximately to 50 percentile at 28 weeks gestational age. She has a respiratory rate of 80 per minute with subcostal retractions. When you listen to her lungs, you hear expiratory grunting. Without oxygen supplementation her oxygen saturation varies between 80 and 89%, and with supplemental oxygen, the saturation in the foot rises to 96 %. The first arterial blood gas shows mild CO-retention and acidosis (PaCO2 7.5 kPa, Ph 7.25 BE -5.5 mmol/l). CRP is 18 mg/l (ref < 5) and hemoglobin is 14 g/dl (ref 12-18).
The most probable diagnosis is Respiratory distress syndrome, but lung infection is also likely.

Question 1:

Which 3 initial treatments do you suggest?

- ☐ Blood Transfusion
- ☐ Continued supplemental oxygen
- ☐ Ventilation with High Frequency Oscillation (HFO)
- ☐ Continuous positive airway pressure (CPAP)
- ☐ Balloon atrial septostomy
- ☐ Antibiotic treatment
- ☐ Phototherapy
- ☐ Intravenous diuretics

Answer:

Continued supplemental oxygen
Continuous positive airway pressure (CPAP)
Antibiotic treatment

Part 6:

Lisbeth is 32 years old and gave birth to a boy two years ago after an uncomplicated pregnancy. She is now pregnant for the second time.
The current pregnancy has been largely uncomplicated, but she comes in to the maternity ward with contractions and rupture of membranes during the 28th gestational week. Tocolytic treatment does not stop the progress, and Lisbeth gives birth to a girl six hours later.
You are being called for as resident in the pediatric ward. The birth is vaginal and occurs a few minutes after your arrival to the maternity ward. You find a girl who cries immediately, but breaths slower than you had expected. Apgar score is 6 at 1 min with minus for color, tone, response, and respiration.
Three minutes after birth, she has slow and irregular respiration at 30 per minute. You can also see that she has nasal flaring. Heart rate is 100 per minute. You find her hands and feet blue, and upon closer examination you think she is also blue on and around the lips.
You initiate first ventilation with bag and mask and oxygen supplementation. After 2 minutes the baby's heart rate has increased to 140 per minute, the cyanosis has improved and she breaths spontaneously at a rate of 80 per minute.
You transfer her to the Neonatal Department located next door.
You ordered Arterial blood gas, blood sample for infection and hematology and Chest X-ray.
X-ray showed bilateral granular opacities and air bronchograms.
Her weight is 1200 grams, which corresponds approximately to 50 percentile at 28 weeks gestational age. She has a respiratory rate of 80 per minute with subcostal retractions. When you listen to her lungs, you hear expiratory grunting. Without oxygen supplementation her oxygen saturation varies between 80 and 89%, and with supplemental oxygen, the saturation in the foot rises to 96 %. The first arterial blood gas shows mild CO-retention and acidosis (PaCO2 7.5 kPa, Ph 7.25 BE -5.5 mmol/l). CRP is 18 mg/l (ref < 5) and hemoglobin is 14 g/dl (ref 12-18).
The most probable diagnosis is Respiratory distress syndrome, but lung infection is also likely.
You continued supplemental oxygen and ordered continuous positive airway pressure (CPAP) and antibiotic treatment.

Question 1:

She needed CPAP for 4 weeks and supplemental oxygen for another six weeks. Which complications would you specifically consider at follow up of this girl two years later?

Renal dysfunction [pull-down menu]
Leukemia [pull-down menu]
Delayed psychomotor development [pull-down menu]
Coeliac disease [pull-down menu]
Bronchopulmonary dysplasia/asthma-like symptoms [pull-down menu]
Biliary obstruction [pull-down menu]

Answer:

Renal dysfunction = **No**
Leukemia = **No**
Delayed psychomotor development = **Yes**
Coeliac disease = **No**
Bronchopulmonary dysplasia/asthma-like symptoms = **Yes**
Biliary obstruction = **No**

Assessment: MEDSEM9_STASJON18_V15_ORD

Part 1:

Thirteen-year-old Pia Christiansen contacts her GP because of "intestinal discomfort" last six months. She has some pain in the lower abdomen and a feeling of belly distension; some days it hurts so much that she cannot go to school, other days the pain is gone. In addition, she has irregular bowel movements, with alternating hard and "loose" stools. She is an active girl with interest for both sports (cross country) and music (choral singing), but lately she has felt tired and in "bad shape". She had menarche 1 year ago, and has since then had relatively regular menstrual bleeding.

Question 1:

Which questions are most important to ask for the GP? Indicate the two you find most relevant.

- ☐ «Have you noticed any fresh blood in your stools?»
- ☐ «Do you have any heredity for malignancies?»
- ☐ «Do you often feel sorrow?»
- ☐ «Have you lost weight lately?»
- ☐ «Does coughing cause abdominal pain?»
- ☐ «Does walking in stairs make you short of breath?»

Answer:

«Have you noticed any fresh blood in your stools?»
«Have you lost weight lately?»

Part 2:

Thirteen-year-old Pia Christiansen contacts her GP because of "intestinal discomfort" last six months. She has some pain in the lower abdomen and a feeling of belly distension; some days it hurts so much that she cannot go to school, other days the pain is gone. In addition, she has irregular bowel movements, with alternating hard and "loose" stools. She is an active girl with interest for both sports (cross country) and music (choral singing), but lately she has felt tired and in "bad shape". She had menarche 1 year ago, and has since then had relatively regular menstrual bleeding.
The most important questions are if she has noticed any fresh blood in her stools, and if she has lost weight lately. The answer is “no” to both questions.

Question 1:

Which 2 parts of the clinical examinations do you find the most important?

- ☐ Otoscopy
- ☐ To measure length and weight and plot the values in a growth chart
- ☐ Abdominal auscultation
- ☐ Gynecological examination
- ☐ Abdominal palpation
- ☐ Neurological examination
- ☐ Rectal exploration
- ☐ Cardiac auscultation

Answer:

To measure length and weight and plot the values in a growth chart
Abdominal palpation

Part 3:

Thirteen-year-old Pia Christiansen contacts her GP because of "intestinal discomfort" last six months. She has some pain in the lower abdomen and a feeling of belly distension; some days it hurts so much that she cannot go to school, other days the pain is gone. In addition, she has irregular bowel movements, with alternating hard and "loose" stools. She is an active girl with interest for both sports (cross country) and music (choral singing), but lately she has felt tired and in "bad shape". She had menarche 1 year ago, and has since then had relatively regular menstrual bleeding.
The most important questions are if she has noticed any fresh blood in her stools, and if she has lost weight lately. The answer is “no” to both questions.
The two most relevant parts are to measure length and weight and plot the values in a growth chart and abdominal palpation. She had not lost weight, and there were no abdominal masses, only diffuse abdominal tenderness. Fecal blood tests were negative.

Question 1:

Some blood tests were requested, and the GP considers other supplementary investigations. Which of the following examinations do you find particularly important in this situation?

- Rectoscopy
- Chest X-ray
- Abdominal X-ray
- Abdominal MRI-scan
- FeCal-test of the stools

Answer:

FeCal-test of the stools

Part 4:

Thirteen-year-old Pia Christiansen contacts her GP because of "intestinal discomfort" last six months. She has some pain in the lower abdomen and a feeling of belly distension; some days it hurts so much that she cannot go to school, other days the pain is gone. In addition, she has irregular bowel movements, with alternating hard and "loose" stools. She is an active girl with interest for both sports (cross country) and music (choral singing), but lately she has felt tired and in "bad shape". She had menarche 1 year ago, and has since then had relatively regular menstrual bleeding.
The most important questions are if she has noticed any fresh blood in her stools, and if she has lost weight lately. The answer is “no” to both questions.
The two most relevant parts are to measure length and weight and plot the values in a growth chart and abdominal palpation. She had not lost weight, and there were no abdominal masses, only diffuse abdominal tenderness. Fecal blood tests were negative.
FeCal-test of the stools is particularly important in this situation. It was negative. Blood samples showed [reference values]: Hb 10.3 [11.7-15.3] g/dL, leukocytes 5.8 [3.6-9.3] x 10^9 cells/L, trombocytes 244 [165-387] x 10^9 cells/L, creatinine 63 [50-90] µmol/L, ALAT 17 [10-45] U/L, ferritin 8 [10-167 µg/L], TSH 4.1 [0.5-3.4] mIE/L, glucose 5.5 [3.7-5.1] mmol/L, glutenantibodies not present.

Question 1:

Considering the available information, please indicate the likelihood of the following diagnoses:

Colon cancer [pull-down menu]
Irritable bowel syndrome [pull-down menu]
Inflammatory bowel disease [pull-down menu]
Celiac disease [pull-down menu]
Hepatitis [pull-down menu]

Answer:

Colon cancer = **Unlikely**
Irritable bowel syndrome = **Likely**
Inflammatory bowel disease = **Unlikely**
Celiac disease = **Unlikely**
Hepatitis = **Unlikely**

Part 5:

Thirteen-year-old Pia Christiansen contacts her GP because of "intestinal discomfort" last six months. She has some pain in the lower abdomen and a feeling of belly distension; some days it hurts so much that she cannot go to school, other days the pain is gone. In addition, she has irregular bowel movements, with alternating hard and "loose" stools. She is an active girl with interest for both sports (cross country) and music (choral singing), but lately she has felt tired and in "bad shape". She had menarche 1 year ago, and has since then had relatively regular menstrual bleeding.
The most important questions are if she has noticed any fresh blood in her stools, and if she has lost weight lately. The answer is “no” to both questions.
The two most relevant parts are to measure length and weight and plot the values in a growth chart and abdominal palpation. She had not lost weight, and there were no abdominal masses, only diffuse abdominal tenderness. Fecal blood tests were negative.
FeCal-test of the stools is particularly important in this situation. It was negative. Blood samples showed [reference values]: Hb 10.3 [11.7-15.3] g/dL, leukocytes 5.8 [3.6-9.3] x 10^9 cells/L, trombocytes 244 [165-387] x 10^9 cells/L, creatinine 63 [50-90] µmol/L, ALAT 17 [10-45] U/L, ferritin 8 [10-167 µg/L], TSH 4.1 [0.5-3.4] mIE/L, glucose 5.5 [3.7-5.1] mmol/L, glutenantibodies not present.
Colon cancer, inflammatory bowel disease, celiac disease and hepatitis are unlikely.

Question 1:

The blood samples showed a mild anemia (Hb below the normal lower limit). Which is the most probable cause?

- Hemolysis
- Folate deficiency
- Iron deficiency

Answer:

Iron deficiency

Part 6:

Thirteen-year-old Pia Christiansen contacts her GP because of "intestinal discomfort" last six months. She has some pain in the lower abdomen and a feeling of belly distension; some days it hurts so much that she cannot go to school, other days the pain is gone. In addition, she has irregular bowel movements, with alternating hard and "loose" stools. She is an active girl with interest for both sports (cross country) and music (choral singing), but lately she has felt tired and in "bad shape". She had menarche 1 year ago, and has since then had relatively regular menstrual bleeding.
The most important questions are if she has noticed any fresh blood in her stools, and if she has lost weight lately. The answer is “no” to both questions.
The two most relevant parts are to measure length and weight and plot the values in a growth chart and abdominal palpation. She had not lost weight, and there were no abdominal masses, only diffuse abdominal tenderness. Fecal blood tests were negative.
FeCal-test of the stools is particularly important in this situation. It was negative. Blood samples showed [reference values]: Hb 10.3 [11.7-15.3] g/dL, leukocytes 5.8 [3.6-9.3] x 10^9 cells/L, trombocytes 244 [165-387] x 10^9 cells/L, creatinine 63 [50-90] µmol/L, ALAT 17 [10-45] U/L, ferritin 8 [10-167 µg/L], TSH 4.1 [0.5-3.4] mIE/L, glucose 5.5 [3.7-5.1] mmol/L, glutenantibodies not present.
Colon cancer, inflammatory bowel disease, celiac disease and hepatitis are unlikely.
Iron deficiency is the most probable cause of the anemia.

Question 1:

Which is the most probable cause of the iron deficiency in this patient?

- Atrophic gastritis
- Menstruation bleednings
- Malabsorption of iron
- Occult blood loss from the bowel

Answer:

Menstruation bleednings

Part 7:

Thirteen-year-old Pia Christiansen contacts her GP because of "intestinal discomfort" last six months. She has some pain in the lower abdomen and a feeling of belly distension; some days it hurts so much that she cannot go to school, other days the pain is gone. In addition, she has irregular bowel movements, with alternating hard and "loose" stools. She is an active girl with interest for both sports (cross country) and music (choral singing), but lately she has felt tired and in "bad shape". She had menarche 1 year ago, and has since then had relatively regular menstrual bleeding.
The most important questions are if she has noticed any fresh blood in her stools, and if she has lost weight lately. The answer is “no” to both questions.
The two most relevant parts are to measure length and weight and plot the values in a growth chart and abdominal palpation. She had not lost weight, and there were no abdominal masses, only diffuse abdominal tenderness. Fecal blood tests were negative.
FeCal-test of the stools is particularly important in this situation. It was negative. Blood samples showed [reference values]: Hb 10.3 [11.7-15.3] g/dL, leukocytes 5.8 [3.6-9.3] x 10^9 cells/L, trombocytes 244 [165-387] x 10^9 cells/L, creatinine 63 [50-90] µmol/L, ALAT 17 [10-45] U/L, ferritin 8 [10-167 µg/L], TSH 4.1 [0.5-3.4] mIE/L, glucose 5.5 [3.7-5.1] mmol/L, glutenantibodies not present.
Colon cancer, inflammatory bowel disease, celiac disease and hepatitis are unlikely. Iron deficiency is the most probable cause of the anemia.
Menstruation bleedings is the most probable cause of iron deficiency in this patient.

Question 1:

The blood samples also showed slightly increased glucose level. The most probable cause is:

- The patient has undiscovered diabetes mellitus
- A technical error in the laboratory
- The patient has eaten before sampling (non-fasting blood glucose)

Answer:

The patient has eaten before sampling (non-fasting blood glucose)

Part 8:

Thirteen-year-old Pia Christiansen contacts her GP because of "intestinal discomfort" last six months. She has some pain in the lower abdomen and a feeling of belly distension; some days it hurts so much that she cannot go to school, other days the pain is gone. In addition, she has irregular bowel movements, with alternating hard and "loose" stools. She is an active girl with interest for both sports (cross country) and music (choral singing), but lately she has felt tired and in "bad shape". She had menarche 1 year ago, and has since then had relatively regular menstrual bleeding.
The most important questions are if she has noticed any fresh blood in her stools, and if she has lost weight lately. The answer is “no” to both questions.
The two most relevant parts are to measure length and weight and plot the values in a growth chart and abdominal palpation. She had not lost weight, and there were no abdominal masses, only diffuse abdominal tenderness. Fecal blood tests were negative.
FeCal-test of the stools is particularly important in this situation. It was negative. Blood samples showed [reference values]: Hb 10.3 [11.7-15.3] g/dL, leukocytes 5.8 [3.6-9.3] x 10^9 cells/L, trombocytes 244 [165-387] x 10^9 cells/L, creatinine 63 [50-90] µmol/L, ALAT 17 [10-45] U/L, ferritin 8 [10-167 µg/L], TSH 4.1 [0.5-3.4] mIE/L, glucose 5.5 [3.7-5.1] mmol/L, glutenantibodies not present.
Colon cancer, inflammatory bowel disease, celiac disease and hepatitis are unlikely. Iron deficiency is the most probable cause of the anemia. Menstruation bleedings is the most probable cause of iron deficiency in this patient. The most probable cause is that the patient has eaten before sampling (non-fasting blood glucose).

Question 1:

The blood samples also showed a mild elevation of TSH. This may be a sign of:

- Hypothyreosis
- Hyperthyreosis
- Thyreotoxicosis

Answer:

Hypothyreosis

Part 9:

Thirteen-year-old Pia Christiansen contacts her GP because of "intestinal discomfort" last six months. She has some pain in the lower abdomen and a feeling of belly distension; some days it hurts so much that she cannot go to school, other days the pain is gone. In addition, she has irregular bowel movements, with alternating hard and "loose" stools. She is an active girl with interest for both sports (cross country) and music (choral singing), but lately she has felt tired and in "bad shape". She had menarche 1 year ago, and has since then had relatively regular menstrual bleeding.
The most important questions are if she has noticed any fresh blood in her stools, and if she has lost weight lately. The answer is “no” to both questions.
The two most relevant parts are to measure length and weight and plot the values in a growth chart and abdominal palpation. She had not lost weight, and there were no abdominal masses, only diffuse abdominal tenderness. Fecal blood tests were negative.
FeCal-test of the stools is particularly important in this situation. It was negative. Blood samples showed [reference values]: Hb 10.3 [11.7-15.3] g/dL, leukocytes 5.8 [3.6-9.3] x 10^9 cells/L, trombocytes 244 [165-387] x 10^9 cells/L, creatinine 63 [50-90] µmol/L, ALAT 17 [10-45] U/L, ferritin 8 [10-167 µg/L], TSH 4.1 [0.5-3.4] mIE/L, glucose 5.5 [3.7-5.1] mmol/L, glutenantibodies not present.
Colon cancer, inflammatory bowel disease, celiac disease and hepatitis are unlikely. Iron deficiency is the most probable cause of the anemia. Menstruation bleedings is the most probable cause of iron deficiency in this patient. The most probable cause is that the patient has eaten before sampling (non-fasting blood glucose).
A mild elevation of TSH may be a sign of hypothyreosis. Extended sampling with respect to thyreoid function is indicated in this situation.

Question 1:

In case of hypothyreosis in children, you expect to find:

- Elevated level of thyroxine (free T4)
- Low level of thyroxine (free T4)
- Low level of thyroxine (free T4) and elevated level of triiodthyronine (freeT3)

Answer:

Low level of thyroxine (free T4)

Part 10:

Thirteen-year-old Pia Christiansen contacts her GP because of "intestinal discomfort" last six months. She has some pain in the lower abdomen and a feeling of belly distension; some days it hurts so much that she cannot go to school, other days the pain is gone. In addition, she has irregular bowel movements, with alternating hard and "loose" stools. She is an active girl with interest for both sports (cross country) and music (choral singing), but lately she has felt tired and in "bad shape". She had menarche 1 year ago, and has since then had relatively regular menstrual bleeding.
The most important questions are if she has noticed any fresh blood in her stools, and if she has lost weight lately. The answer is “no” to both questions.
The two most relevant parts are to measure length and weight and plot the values in a growth chart and abdominal palpation. She had not lost weight, and there were no abdominal masses, only diffuse abdominal tenderness. Fecal blood tests were negative.
FeCal-test of the stools is particularly important in this situation. It was negative. Blood samples showed [reference values]: Hb 10.3 [11.7-15.3] g/dL, leukocytes 5.8 [3.6-9.3] x 10^9 cells/L, trombocytes 244 [165-387] x 10^9 cells/L, creatinine 63 [50-90] µmol/L, ALAT 17 [10-45] U/L, ferritin 8 [10-167 µg/L], TSH 4.1 [0.5-3.4] mIE/L, glucose 5.5 [3.7-5.1] mmol/L, glutenantibodies not present.
Colon cancer, inflammatory bowel disease, celiac disease and hepatitis are unlikely. Iron deficiency is the most probable cause of the anemia. Menstruation bleedings is the most probable cause of iron deficiency in this patient. The most probable cause is that the patient has eaten before sampling (non-fasting blood glucose).
A mild elevation of TSH may be a sign of hypothyreosis. Extended sampling with respect to thyreoid function is indicated in this situation.
In case of hypothyreosis in children, you expect a low level of thyroxine (free T4).

Question 1:

Which is the explanation of the combination of an elevated TSH and a low level of thyroxine (free T4)?

- TSH inhibits the secretion of thyroxine (free T4) from the thyroid gland
- TSH stimulates the secretion of thyroxine (free T4) from the thyroid gland
- Thyroxine (free T4) inhibits the secretion of TSH from the hypophysis
- Thyroxine (free T4) stimulates the secretion of TSH from the hypophysis

Answer:
Thyroxine (free T4) inhibits the secretion of TSH from the hypophysis

Assessment: MEDSEM9_STASJON19_V15_ORD

Part 1:

A 16 months old boy develops periods of increasing agitation an afternoon. In between these episodes he appears normal and plays well. The episodes start with sudden screaming for 20 minutes and curling up, before he then relaxes and starts playing again. This occurs several times until the parents notice traces of blood in his nappy. The parents take him to their general practitioner (GP) (fastlege).

Question 1:

As a GP, what examinations would you do? (2 lines)

Answer:

Abdominal palpation	2
Rectal exploration	3

Question 2:

As a GP what would you consider as the most probable diagnosis? (2 lines)

Answer:

Points are given only for one diagnosis

Intussusception (norsk: invaginasjon)	3
Other possibilities:	
Acute gastroenteritis	1
Acute otitis media	1
Ileus (of other causes)	1
Urinary infections	0

Part 2:

A 16 months old boy develops periods of increasing agitation an afternoon. In between these episodes he appears normal and plays well. The episodes start with sudden screaming for 20 minutes and curling up, before he then relaxes and starts playing again. This occurs several times until the parents notice traces of blood in his nappy. The parents take him to their general practitioner (GP) (fastlege).
The GP chooses to admit the boy to hospital under the diagnosis: Intussusception (norsk: Invaginasjon). He is admitted to the paediatric ward at 19.00, you are the on-call physician. You take the history from the parents, who explain his symptoms, which are unchanged. Their GP has taken no temperature or blood tests.

Question 1:

As the on-call physician, what signs do you expect to find on your clinical examination of the child? (3 lines)

Answer:

Points given for one alternative

No particular signs	1
Mucous like bloody stains on glove after exploration	3

Question 2:

As the on-call physician, which investigations would you proceed with at the hospital? (3 lines)

Answer:

X-ray of colon with barium enema	3
Ultrasound examination of abdomen	1

Part 3:

Part 3 og 4
A 16 months old boy develops periods of increasing agitation an afternoon. In between these episodes he appears normal and plays well. The episodes start with sudden screaming for 20 minutes and curling up, before he then relaxes and starts playing again. This occurs several times until the parents notice traces of blood in his nappy. The parents take him to their general practitioner (GP) (fastlege).
The GP chooses to admit the boy to hospital under the diagnosis: Intussusception (norsk: Invaginasjon). He is admitted to the paediatric ward at 19.00, you are the on-call physician. You take the history from the parents, who explain his symptoms, which are unchanged. Their GP has taken no temperature or blood tests.
You have requested an x-ray examination of the colon with a barium enema.

Question 1:

What do you expect to find by this examination? (1 line)

Answer:

Intussusception of the small intestine (Intussusception is enough) (Norsk: invaginasjon) 4

Part 4:

A 16 months old boy develops periods of increasing agitation an afternoon. In between these episodes he appears normal and plays well. The episodes start with sudden screaming for 20 minutes and curling up, before he then relaxes and starts playing again. This occurs several times until the parents notice traces of blood in his nappy. The parents take him to their general practitioner (GP) (fastlege).
The GP chooses to admit the boy to hospital under the diagnosis: Intussusception (norsk: Invaginasjon). He is admitted to the paediatric ward at 19.00, you are the on-call physician. You take the history from the parents, who explain his symptoms, which are unchanged. Their GP has taken no temperature or blood tests.
You have requested an x-ray examination of the colon with a barium enema.
The diagnosis is: Intussusception (norsk: Invaginasjon) of the small intestine.

Question 1:

What treatment should the boy be given? (2 lines)

Answer:

Reposition of intussuscepted intestine through barium enema 4
If not effective: Surgery. 1

Assessment: MEDSEM9_STASJON20_V15_ORD

Part 1:

At a routine visit to the health care centre, a 2 year old boy of Norwegian parents appeared a little pale, his weight and height were at the 10 percentile, and his head circumference at the 25 percentile. The clinical exam was otherwise normal. Haemoglobin was 7.8 g/100ml (11.3-12.3).

Question 1:

Determine the likelihood of the following diagnoses:

Iron deficiency anaemia [pull-down menu]
Coeliac disease [pull-down menu]
Post-infection anaemia [pull-down menu]
Haemoglobinopathies [pull-down menu]
Leukaemia [pull-down menu]
Urinary tract infection [pull-down menu]
Rickets [pull-down menu]

Answer:

Iron deficiency anaemia = **Likely**
Coeliac disease = **Unlikely**
Post-infection anaemia = **Likely**
Haemoglobinopathies = **Unlikely**
Leukaemia = **Unlikely**
Urinary tract infection = **Unlikely**
Rickets = **Unlikely**

Part 2:

At a routine visit to the health care centre, a 2 year old boy of Norwegian parents appeared a little pale, his weight and height were at the 10 percentile, and his head circumference at the 25 percentile. The clinical exam was otherwise normal. Haemoglobin was 7.8 g/100ml (11.3-12.3).
During a more detailed interview the parents told you that the child did not eat very well, but he was very fond of milk. He attended kindergarten and had had several episodes with fever and upper airway infections. His last febrile episode started 14 days ago and he had to be home for one week to fully recover, no antibiotics given, but was medicated with paracetamol when spiking fever.

Question 1:

In addition to Hb, WBC w/diff.count, Platelets, MCH, MCV, MCHC, which 2 of the following alternatives of tests are most appropriate as a start of the diagnostic process?

- ☐ Bone marrow examination
- ☐ Haemoglobin electrophoresis
- ☐ Serum ferritin and total iron binding capacity (TIBC)
- ☐ Antibodies against gluten and gliadin
- ☐ Peripheral blood smear, reticulocyte count
- ☐ CRP (C-reactive protein)
- ☐ Vitamin-D status

Answer:

Serum ferritin and total iron binding capacity (TIBC)
Peripheral blood smear, reticulocyte count

Part 3:

At a routine visit to the health care centre, a 2 year old boy of Norwegian parents appeared a little pale, his weight and height were at the 10 percentile, and his head circumference at the 25 percentile. The clinical exam was otherwise normal. Haemoglobin was 7.8 g/100ml (11.3-12.3).
During a more detailed interview the parents told you that the child did not eat very well, but he was very fond of milk. He attended kindergarten and had had several episodes with fever and upper airway infections. His last febrile episode started 14 days ago and he had to be home for one week to fully recover, no antibiotics given, but was medicated with paracetamol when spiking fever.
The initial tests showed: Hb 7.8 g/100 ml (11.3-12-3), WBC 7.5 x10^9/l (6.0-10.0) granulocytes 55% (40-60) lymphocytes 35% (30-50), platelets 255 x 10^9/l (150-400), reticulocyte count 2 (30-100), The following results were normal: CRP, MCH, MCV, MCHC, ferritin and TIBC. Other tests have not been reported yet.

Question 1:

Re-evaluate the likelihood of the following diagnoses:

Iron deficiency anaemia [pull-down menu]
Coeliac disease [pull-down menu]
Post-infection anaemia [pull-down menu]
Haemoglobinopathies [pull-down menu]
Leukaemia [pull-down menu]
Urinary tract infection [pull-down menu]
Rickets [pull-down menu]

Answer:

Iron deficiency anaemia = **Unlikely**
Coeliac disease = **Unlikely**
Post-infection anaemia = **Likely**
Haemoglobinopathies = **Unlikely**
Leukaemia = **Unlikely**
Urinary tract infection = **Unlikely**
Rickets = **Unlikely**

Part 4:

At a routine visit to the health care centre, a 2 year old boy of Norwegian parents appeared a little pale, his weight and height were at the 10 percentile, and his head circumference at the 25 percentile. The clinical exam was otherwise normal. Haemoglobin was 7.8 g/100ml (11.3-12.3).
During a more detailed interview the parents told you that the child did not eat very well, but he was very fond of milk. He attended kindergarten and had had several episodes with fever and upper airway infections. His last febrile episode started 14 days ago and he had to be home for one week to fully recover, no antibiotics given, but was medicated with paracetamol when spiking fever.
The initial tests showed: Hb 7.8 g/100 ml (11.3-12-3), WBC 7.5 x10^9/l (6.0-10.0) granulocytes 55% (40-60) lymphocytes 35% (30-50), platelets 255 x 10^9/l (150-400), reticulocyte count 2 (30-100), The following results were normal: CRP, MCH, MCV, MCHC, ferritin and TIBC. Other tests have not been reported yet.
He was followed and his blood values normalized. Four years later he was diagnosed with acute lymphoblastic leukaemia (ALL) of the pre-B cell type and was treated as a standard risk ALL with cytotoxic drugs for 2 ½ years. He stayed in complete remission.

Question 1:

How do you estimate his risk to encounter the following problems as a young adult?

Cardiac arrhythmias [pull-down menu]
Fatigue [pull-down menu]
Thyroid gland dysfunction [pull-down menu]
Infertility [pull-down menu]
Cancer [pull-down menu]
Renal failure [pull-down menu]
Chronic obstructive lung disease [pull-down menu]
Cognitive problems [pull-down menu]

Answer:
Cardiac arrhythmias = **Close to normal**
Fatigue = **Increased**
Thyroid gland dysfunction = **Close to normal**
Infertility = **Increased**
Cancer = **Increased**
Renal failure = **Close to normal**
Chronic obstructive lung disease = **Close to normal**
Cognitive problems = **Increased**

Assessment: MEDSEM9_STASJON21_V15_ORD

Part 1:

Tove, a 31 year old woman, comes to your office. She has had a vaginal bleeding during the last week. She is not sure whether it is her period or not as the amount of bleeding has varied throughout the week. The last year she has had irregular periods and she is not sure when she had her last "normal" period. This morning she felt dizzy as she passed some blood clots and had some pain. Tove is otherwise healthy. The urine pregnancy test is positive.

Question 1:

What is the first thing you have to evaluate?

- Length of the pregnancy
- If she uses any contraceptives
- If she has had any previous extra uterine pregnancy
- If she is hemodynamically stable
- If there is any pregnancy products in her vagina

Answer:

If she is hemodynamically stable

Part 2:

Tove, a 31 year old woman, comes to your office. She has had a vaginal bleeding during the last week. She is not sure whether it is her period or not as the amount of bleeding has varied throughout the week. The last year she has had irregular periods and she is not sure when she had her last "normal" period. This morning she felt dizzy as she passed some blood clots and had some pain. Tove is otherwise healthy. The urine pregnancy test is positive.

Question 1:

What tests do you perform to evaluate if she is hemodynamically stable?

Answer:

Pula(2) Blood pressure (2) S-Hb (2)

Part 3:

Tove, a 31 year old woman, comes to your office. She has had a vaginal bleeding during the last week. She is not sure whether it is her period or not as the amount of bleeding has varied throughout the week. The last year she has had irregular periods and she is not sure when she had her last "normal" period. This morning she felt dizzy as she passed some blood clots and had some pain. Tove is otherwise healthy. The urine pregnancy test is positive.
Her pulse, blood pressure and S-Hb are normal. When you perform your speculum examination you find some blood clots in the vagina but no cervical dilatation. The abdomen is soft but the uterus is slightly enlarged and somewhat tender. No pain or masses are found when palpating the adnexa.
You perform a vaginal ultrasound examination and find a thickened endometrium. Normal ovaries and no sign of intra-abdominal bleeding.

Question 1:

Which are the three main diagnoses you have to contemplate?

Answer:

miscarriage (2p) extrauterine pregnancy (2p) (early) intrauterine (2p)

Part 4:

Tove, a 31 year old woman, comes to your office. She has had a vaginal bleeding during the last week. She is not sure whether it is her period or not as the amount of bleeding has varied throughout the week. The last year she has had irregular periods and she is not sure when she had her last “normal” period. This morning she felt dizzy as she passed some blood clots and had some pain. Tove is otherwise healthy. The urine pregnancy test is positive.
Her pulse, blood pressure and S-Hb are normal. When you perform your speculum examination you find some blood clots in the vagina but no cervical dilatation. The abdomen is soft but the uterus is slightly enlarged and somewhat tender. No pain or masses are found when palpating the adnexa.
You perform a vaginal ultrasound examination and find a thickened endometrium. Normal ovaries and no sign of intra-abdominal bleeding.

Question 1:

What blood test to you need to take at this visit to try to further differentiate between miscarriage, extrauterine pregnancy, early intrauterine pregnancy at a later follow up?

Answer:

S-hCG (6p)

Part 5:

Tove, a 31 year old woman, comes to your office. She has had a vaginal bleeding during the last week. She is not sure whether it is her period or not as the amount of bleeding has varied throughout the week. The last year she has had irregular periods and she is not sure when she had her last “normal” period. This morning she felt dizzy as she passed some blood clots and had some pain. Tove is otherwise healthy. The urine pregnancy test is positive.
Her pulse, blood pressure and S-Hb are normal. When you perform your speculum examination you find some blood clots in the vagina but no cervical dilatation. The abdomen is soft but the uterus is slightly enlarged and somewhat tender. No pain or masses are found when palpating the adnexa.
You perform a vaginal ultrasound examination and find a thickened endometrium. Normal ovaries and no sign of intra-abdominal bleeding.
The S-hCG is 1000 U/L. Tove is hemodynamic stable without any pain.

Question 1:

Which one of the suggested follow-up regimens would you chose?

- Repeated S-hCG and gynaecological examination with vaginal ultrasound in 2-3 days
- Repeated S-hCG and gynaecological examination with vaginal ultrasound in 2-3 weeks
- No follow up regimen necessary as the S-hCG is low
- The S-hCG shows that the pregnancy is pathological and you admit the patient for further treatment

Answer:

Repeated S-hCG and gynaecological examination with vaginal ultrasound in 2-3 days

Part 6:

Tove, a 31 year old woman, comes to your office. She has had a vaginal bleeding during the last week. She is not sure whether it is her period or not as the amount of bleeding has varied throughout the week. The last year she has had irregular periods and she is not sure when she had her last “normal” period. This morning she felt dizzy as she passed some blood clots and had some pain. Tove is otherwise healthy. The urine pregnancy test is positive.
Her pulse, blood pressure and S-Hb are normal. When you perform your speculum examination you find some blood clots in the vagina but no cervical dilatation. The abdomen is soft but the uterus is slightly enlarged and somewhat tender. No pain or masses are found when palpating the adnexa.
You perform a vaginal ultrasound examination and find a thickened endometrium. Normal ovaries and no sign of intra-abdominal bleeding.
The S-hCG is 1000 U/L. Tove is hemodynamic stable without any pain.
During follow up Tove is found to have an incomplete abortion.

Question 1:

Which three treatment options are available for Tove?

Answer:
Expectant management (2p) Prostaglandin analogue (misoprostol) (2p) Surgical evacuation (2p)

Assessment: MEDSEM9_STASJON22_V15_ORD

Part 1:

Johanne, a 50 year old woman, present herself with an ongoing heavy vaginal bleeding since three weeks. Previously she has had regular periods every month. Before her current bleeding started she had her last menstrual period 3 months ago. She has two children and is otherwise healthy and is not on any medication.

Question 1:

Which is the most likely explanation for her symptoms?

- Anovulation
- Endometrial cancer
- Cervical cancer
- Endometrial polyps
- Cervical polyps

Answer:

Anovulation

Part 2:

Johanne, a 50 year old woman, present herself with an ongoing heavy vaginal bleeding since three weeks. Previously she has had regular periods every month. Before her current bleeding started she had her last menstrual period 3 months ago. She has two children and is otherwise healthy and is not on any medication.
On vaginal inspection no cervical polyps are seen. On palpation and vaginal ultrasound a normal sized uterus with an 8 mm thick inhomogeneous endometrium is found.

Question 1:

Which two diagnostic tests would you perform to try to exclude malignancy?

- [ ] S-FSH
- [ ] S-LH
- [ ] S TSH
- [ ] Pap smear
- [ ] Endometrial biopsy

Answer:

Pap smear
Endometrial biopsy

Part 3:

Johanne, a 50 year old woman, present herself with an ongoing heavy vaginal bleeding since three weeks. Previously she has had regular periods every month. Before her current bleeding started she had her last menstrual period 3 months ago. She has two children and is otherwise healthy and is not on any medication.
On vaginal inspection no cervical polyps are seen. On palpation and vaginal ultrasound a normal sized uterus with an 8 mm thick inhomogeneous endometrium is found.
The PAP smear is normal and the endometrial biopsy shows simple hyperplasia.
When you discuss the results with Johanne, she is worried and asks if she has cancer. She also wants an explanation to why she has developed this condition.

Question 1:

What do you tell her?

- Benign condition. Findings after a long period of estrogen dominance owing to anovulation.
- Benign condition. Findings after a long period of gestagen dominance owing to anovulation.
- Premalign condition. Findings after a long period estrogen dominance owing to anovulation.

- Premalign condition. Findings after a long period gestagen dominance owing to anovulation.

Answer:
Benign condition. Findings after a long period of estrogen dominance owing to anovulation.

Part 4:

Johanne, a 50 year old woman, present herself with an ongoing heavy vaginal bleeding since three weeks. Previously she has had regular periods every month. Before her current bleeding started she had her last menstrual period 3 months ago. She has two children and is otherwise healthy and is not on any medication.
On vaginal inspection no cervical polyps are seen. On palpation and vaginal ultrasound a normal sized uterus with an 8 mm thick inhomogeneous endometrium is found.
The PAP smear is normal and the endometrial biopsy shows simple hyperplasia.
When you discuss the results with Johanne, she is worried and asks if she has cancer. She also wants an explanation to why she has developed this condition.
This benign condition has developed during a long period of anovulation with only estrogen secretion.

Question 1:

Which two treatment options can you offer her?

- [ ] Cyclic gestagens
- [ ] Hormonal IUD(Mirena)
- [ ] Estrogens
- [ ] Contraception pill
- [ ] Cobber IUD

Answer:
Cyclic gestagens
Hormonal IUD(Mirena)

Part 5:

Johanne, a 50 year old woman, present herself with an ongoing heavy vaginal bleeding since three weeks. Previously she has had regular periods every month. Before her current bleeding started she had her last menstrual period 3 months ago. She has two children and is otherwise healthy and is not on any medication.
On vaginal inspection no cervical polyps are seen. On palpation and vaginal ultrasound a normal sized uterus with an 8 mm thick inhomogeneous endometrium is found.
The PAP smear is normal and the endometrial biopsy shows simple hyperplasia.
When you discuss the results with Johanne, she is worried and asks if she has cancer. She also wants an explanation to why she has developed this condition.
This benign condition has developed during a long period of anovulation with only estrogen secretion.
She does not want to have a hormonal IUD(Mirena) inserted and you agree on cyclic gestagens as treatment option.

Question 1:

How do you explain the effect of the cyclic gestagens to her?

- Gets the endometrium in to a secretional phase to be shedded after a treatment course.
- Gets the endometrium in to a proliferative phase to be shedded after a treatment course.
- Stimulates the ovary to produce more estrogens.
- Stimulates the ovary to produce more gestagens.

Answer:
Gets the endometrium in to a secretional phase to be shedded after a treatment course.

Assessment: MEDSEM9_STASJON23_V15_ORD

Part 1:

A 20 years old healthy woman works as an assistant at a nursery home. This is her first pregnancy which has been uncomplicated so far except that she has had two episodes with small vaginal bleedings at 12 and 19 weeks of gestation. She is now 25 weeks pregnant.
She sees you for a routine antenatal visit. She feels well, except "a little influenza-like cold". There are a lot of fetal movements. You find normal stable blood pressure, urin stix shows leucocytes +1, traces of blood, else negative. The symphysis-fundal height follows the reference curve. The weight gain is adequate. Fetal heart rate is 136.
She mentions that she had a menstruation-like discomfort 4-5 days ago. She has had coitus three times the last week. Yesterday she noted mucus-like vaginal discharge with traces of blood. There is still some discharge today and the menstruation-like discomfort is still there.

Question 1:

Mention four probable differential diagnoses.

Answer:

1. Post coital bleeding (1p)
2. False labour (Braxton-Hicks contractions; Norwegian: kynnere) (1p)
3. Preterm labour (3p)
4. Urinary tract infection (1p)

Part 2:

A 20 years old healthy woman works as an assistant at a nursery home. This is her first pregnancy which has been uncomplicated so far except that she has had two episodes with small vaginal bleedings at 12 and 19 weeks of gestation. She is now 25 weeks pregnant.
She sees you for a routine antenatal visit. She feels well, except "a little influenza-like cold". There are a lot of fetal movements. You find normal stable blood pressure, urin stix shows leucocytes +1, traces of blood, else negative. The symphysis-fundal height follows the reference curve. The weight gain is adequate. Fetal heart rate is 136.
She mentions that she had a menstruation-like discomfort 4-5 days ago. She has had coitus three times the last week. Yesterday she noted mucus-like vaginal discharge with traces of blood. There is still some discharge today and the menstruation-like discomfort is still there.
You suspect preterm labour. What additional clinical investigations would you do in your office to get closer correct diagnosis?

Question 1:

Which of the two mentioned alternatives are correct?

- ☐ Digital vaginal exploration to evaluate the length and softness of the cervix and adnexa
- ☐ Palpation of uterus
- ☐ Vaginal inspection
- ☐ Check if the fetus is in breech presentation
- ☐ Check if she has mastitis

Answer:

Palpation of uterus
Vaginal inspection

Part 3:

A 20 years old healthy woman works as an assistant at a nursery home. This is her first pregnancy which has been uncomplicated so far except that she has had two episodes with small vaginal bleedings at 12 and 19 weeks of gestation. She is now 25 weeks pregnant.
She sees you for a routine antenatal visit. She feels well, except “a little influenza-like cold”. There are a lot of fetal movements. You find normal stable blood pressure, urin stix shows leucocytes +1, traces of blood, else negative. The symphysis-fundal height follows the reference curve. The weight gain is adequate. Fetal heart rate is 136.
She mentions that she had a menstruation-like discomfort 4-5 days ago. She has had coitus three times the last week. Yesterday she noted mucus-like vaginal discharge with traces of blood. There is still some discharge today and the menstruation-like discomfort is still there.
You suspect preterm labour.
When you palpate the uterus she says it is painful, especially the lower part. The uterus is soft.
When you do vaginal inspection there is mucous discharge around cervix and small amounts of blood. The cervix is intact and the external os is closed. You do a C-Reactive Protein test (CRP) with is 23, i.e. moderately increased.

Question 1:

What is the diagnosis that you now would consider as your first choice? (only one answer is correct)

- Urinary tract infection (UTI)
- Cervical/Vaginal infection
- Choriamnionitis
- Influenza-like disease
- Salginitis

Answer:

Choriamnionitis

Part 4:

A 20 years old healthy woman works as an assistant at a nursery home. This is her first pregnancy which has been uncomplicated so far except that she has had two episodes with small vaginal bleedings at 12 and 19 weeks of gestation. She is now 25 weeks pregnant.
She sees you for a routine antenatal visit. She feels well, except “a little influenza-like cold”. There are a lot of fetal movements. You find normal stable blood pressure, urin stix shows leucocytes +1, traces of blood, else negative. The symphysis-fundal height follows the reference curve. The weight gain is adequate. Fetal heart rate is 136.
She mentions that she had a menstruation-like discomfort 4-5 days ago. She has had coitus three times the last week. Yesterday she noted mucus-like vaginal discharge with traces of blood. There is still some discharge today and the menstruation-like discomfort is still there.
You suspect preterm labour.
When you palpate the uterus she says it is painful, especially the lower part. The uterus is soft.
When you do vaginal inspection there is mucous discharge around cervix and small amounts of blood. The cervix is intact and the external os is closed. You do a C-Reactive Protein test (CRP) with is 23, i.e. moderately increased.
You cannot exclude chorioamnionitis, although she may also have urinary tract infection and a vaginal infection too.

Question 1:

How would you now handle her case? (one alternative is correct)

- Take urine and vaginal samples for bacterial culture and start treating her urinary tract infection and suspected chorioamnionitis with antibiotics, and ask her to come back 3 days later when the bacterial tests are ready.
- The same as 1, but in addition consider to admit her to hospital after 3 days if symptoms have not clearly improved.
- Admit her to hospital as an emergency case.
- Take more blood samples (differential leukocyte count, pro-calcitonin, liver transaminases, thrombocytes) and ask her to come back the next day when the tests are ready.

Answer:

Admit her to hospital as an emergency case.

Assessment: MEDSEM9_STASJON24_V15_ORD

Part 1:

Your patient is 38 years old and consults you for the first antenatal visit. This is her first pregnancy. She is 6-7 weeks pregnant, she has taken two positive pregnancy tests.

Question 1:

List the required paperwork, investigation and tests that should be undertaken as a part of the first antenatal visit (except for gynecological investigation).

Answer:

1. Filling in the Record (Helsekort) for gravide (1p)
2. Blood pressure (1p)
3. Testing urin with stix (1p)
4. Taking blood samples

Bloodtypes (Rhesus/ABO) (1p)
Rubella/Lues/ HIV/Toxoplasmosis (1p)
Hgb, Ferritin (1p)

Part 2:

Your patient is 38 years old and consults you for the first antenatal visit. This is her first pregnancy. She is 6-7 weeks pregnant, she has taken two positive pregnancy tests.
Her blood pressure (BP) is 120/75. The urine is normal. Her body mass index (BMI) is 32 kg/m^2. She tells you she has been treated for hypertension the last 3 years with losartan (an angiotensin II receptor antagonist) which she still is using. Except for her hypertension she is healthy.

Question 1:

Which alternatives for handling her hypertensive disease in pregnancy are correct and which are not? (only two are correct)

- ☐ Stop the treatment with losaratan as the BP is normal and follow her blood pressure regularly.
- ☐ Continue the treatment with losaratan at the same dosage as she currently is using because this regime keeps her BP well regulated.
- ☐ Continue with losartan but increase the dosage with 50% to prevent preeclampsia.
- ☐ Continue antihypertensive treatment but change to an ACE-inhibitor, like enalapril.
- ☐ Continue antihypertensive treatment but change to an a / b -blocker, like labetolol.
- ☐ Refer the patient to a specialist without changing medication.

Answer:

Stop the treatment with losaratan as the BP is normal and follow her blood pressure regularly.
Continue antihypertensive treatment but change to an a / b -blocker, like labetolol.

Part 3:

Your patient is 38 years old and consults you for the first antenatal visit. This is her first pregnancy. She is 6-7 weeks pregnant, she has taken two positive pregnancy tests.
Her blood pressure (BP) is 120/75. The urine is normal. Her body mass index (BMI) is 32 kg/m^2. She tells you she has been treated for hypertension the last 3 years with losartan (an angiotensin II receptor antagonist) which she still is using. Except for her hypertension she is healthy.
You decide to stop treatment with losartan and to follow her blood pressure regularly every 3-4 weeks.

Question 1:

Before she is leaving your office is there more you would ask her about and/or advices you would give her?

Answer:
1. Dietary history (1p)
2. Physical activity habits 1p)
3. Dietary advice (1p)
4. Advice on physical activity (1p)
5. Do glucose tolerance test (1p)
6. Inform her about prenatal tests for chromosomal abnormalities (1p)

Part 4:

Your patient is 38 years old and consults you for the first antenatal visit. This is her first pregnancy. She is 6-7 weeks pregnant, she has taken two positive pregnancy tests.
Her blood pressure (BP) is 120/75. The urine is normal. Her body mass index (BMI) is 32 kg/m^2. She tells you she has been treated for hypertension the last 3 years with losartan (an angiotensin II receptor antagonist) which she still is using. Except for her hypertension she is healthy.
You decide to stop treatment with losartan and to follow her blood pressure regularly every 3-4 weeks.
At consultation at 32 weeks you measure her blood pressure to be 145/95. The urine is normal.
She feels well. She has moderate edemas, but has gained 1.4 kg the last two weeks. The SF-measure follows the curve. You consult a specialist and get the advice to start antihypertensive treatment and control her BP after 4-6 days.

Question 1:

How would you start the antihypertensive treatment? (consider each option, but two of the alternatives options are correct)

Give her the same dosage of losartan as she used at start of pregnancy [pull-down menu]
Give her an ACE-inhibitor [pull-down menu]
Give her nifedipin [pull-down menu]
Give her labetolol [pull-down menu]
Give her a thiazide [pull-down menu]
Give her magnesium tablets [pull-down menu]

Answer:

Give her the same dosage of losartan as she used at start of pregnancy = **No**
Give her an ACE-inhibitor = **No**
Give her nifedipin = **Yes**
Give her labetolol = **Yes**
Give her a thiazide = **No**
Give her magnesium tablets = **No**

Part 5:

Your patient is 38 years old and consults you for the first antenatal visit. This is her first pregnancy. She is 6-7 weeks pregnant, she has taken two positive pregnancy tests.
Her blood pressure (BP) is 120/75. The urine is normal. Her body mass index (BMI) is 32 kg/m^2. She tells you she has been treated for hypertension the last 3 years with losartan (an angiotensin II receptor antagonist) which she still is using. Except for her hypertension she is healthy.
You decide to stop treatment with losartan and to follow her blood pressure regularly every 3-4 weeks.
At consultation at 32 weeks you measure her blood pressure to be 145/95. The urine is normal. She feels well. She has moderate edemas, but has gained 1.4 kg the last two weeks. The SF-measure follows the curve. You consult a specialist and get the advice to start antihypertensive treatment and control her BP after 4-6 days.
You start treating her with 100 mg x3 of labetolol. At the next consultation 5 days later her BP is 145/95 mmHg. The urine dipstick shows +2 for protein. She complains about moderate headache.

Question 1:

Which diagnosis would you consider? (one correct answer)

- Superimposed preeclampsia
- Gestational hypertension

- Kidney disease
- Insufficient treatment of her essential hypertension
- Side effects of labetolol

Answer:
Superimposed preeclampsia

Part 6:

Your patient is 38 years old and consults you for the first antenatal visit. This is her first pregnancy. She is 6-7 weeks pregnant, she has taken two positive pregnancy tests.
Her blood pressure (BP) is 120/75. The urine is normal. Her body mass index (BMI) is 32 kg/m^2. She tells you she has been treated for hypertension the last 3 years with losartan (an angiotensin II receptor antagonist) which she still is using. Except for her hypertension she is healthy.
You decide to stop treatment with losartan and to follow her blood pressure regularly every 3-4 weeks.
At consultation at 32 weeks you measure her blood pressure to be 145/95. The urine is normal. She feels well. She has moderate edemas, but has gained 1.4 kg the last two weeks. The SF-measure follows the curve. You consult a specialist and get the advice to start antihypertensive treatment and control her BP after 4-6 days.
You start treating her with 100 mg x3 of labetolol. At the next consultation 5 days later her BP is 145/95 mmHg. The urine dipstick shows +2 for protein. She complains about moderate headache.
You believe she has developed superimposed preeclampsia and refer her to hospital.
Your hospital colleague asks you request the "most relevant blood tests".

Question 1:

Which blood tests would you request? (name the blood tests)

Answer:

1. Hemoglobin (1p)
2. Liver transamninases (1p)
3. Thrombocytes(1p)
4. LDH (0.5p)
5. Uric acid (0.5p)
6. Hematocrite (0.5p)
7. Creatinine (0.5p))
8. Electrolytes (0.5p)
9. Serum albumin (0.5p

Assessment: MEDSEM9_STASJON25_V15_ORD

Part 1:

Your patient is 29 years old. She is 33 weeks pregnant and consults you because of coughing and a feeling of breathlessness. This is her first pregnancy and there have been no complications so far, except for pelvic pain which has made her immobile. Her BMI is 36 kg/m2 at the start of her pregnancy. She is previously healthy except for a moderate asthma. She is not using anti-asthmatic medicine regularly
Her blood pressure and urine are normal. The SF measure is following curve and the fetal heart rate 130 beats per minute (normal frequency). She has gained 3 kilos in weight the last 3-4 weeks (total weight gain 20 kilos), and she feels her body has "swollen up".
Her coughing is non-productive and started the day before, quite suddenly. She has had the feeling of breathlessness for several weeks, but "now it has got worse". She also has a stinging pain on the right side of thorax when she is coughing. Her pelvic pain has also become worse the last 2-3 days. Her temperature is 37.8 centigrades, pulse 98, regular. A slight systolic murmur is heard over the heart. Blood pressure is normal. At pulmonary auscultation the respiratory sounds are remote but appear normal. Both her legs are enlarged because of her adiposity and edemas.

Question 1:

Which diagnosis would you first exclude (i.e. prioritize diangostically) in this case?

- Pneumonia
- Pulmonary edema
- Pulmonary embolism
- Worsening of her asthma
- Heart failure
- Lung tumor

Answer:

Pulmonary embolism

Part 2:

Your patient is 29 years old. She is 33 weeks pregnant and consults you because of coughing and a feeling of breathlessness. This is her first pregnancy and there have been no complications so far, except for pelvic pain which has made her immobile. Her BMI is 36 kg/m^2 at the start of her pregnancy. She is previously healthy except for a moderate asthma. She is not using anti-asthmatic medicine regularly
Her blood pressure and urine are normal. The SF measure is following curve and the fetal heart rate 130 beats per minute (normal frequency). She has gained 3 kilos in weight the last 3-4 weeks (total weight gain 20 kilos), and she feels her body has "swollen up".
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You think pulmonary embolism is the diagnosis to exclude first. You admit her to hospital as an emergency case, and pulmonary embolism is diagnosed. Also her pelvic vein on left side is filled with thrombi. Her clinical symptoms remained unchanged.

Question 1:

Which drug would be chosen in this case to acute treat her embolism?

- Acetyl salisylic acid (ASA) to inhibit platelet activation
- Low molecular heparin to stop the coagulation cascade
- Combination of ASA and low molecular heparin
- Vitamin K antagonists like warfarin to stop the coagulation cascade
- Infusion of fibrinolytic agents to dissolve the thrombi
- Plasma infusion because of consumption of coagulation factors

Answer:

Low molecular heparin to stop the coagulation cascade

Part 3:

Your patient is 29 years old. She is 33 weeks pregnant and consults you because of coughing and a feeling of breathlessness. This is her first pregnancy and there have been no complications so far, except for pelvic pain which has made her immobile. Her BMI is 36 kg/m^2 at the start of her pregnancy. She is previously healthy except for a moderate asthma. She is not using anti-asthmatic medicine regularly
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She was treated acutely with low molecular heparin, her birth was uncomplicated. After birth she was given warfarin which she used for a year. No genetic or acquired coagulation defects were detected.
One and a half year after her first birth she consults you because she is considering another pregnancy and wants to remove her IUD. Her BMI is now 38.

Question 1:

What are your considerations now and what advice would you give her? (4 lines)

Answer:

Take a thorough dietary and physical activity history (3p)
Remove the IUD, encourage her to loose weight immediately (1)
Propose that removal of the IUD is postponed and give her a concrete plan for weight loss including better diet and more physical activity (3p)

Part 4:

Your patient is 29 years old. She is 33 weeks pregnant and consults you because of coughing and a feeling of breathlessness. This is her first pregnancy and there have been no complications so far, except for pelvic pain which has made her immobile. Her BMI is 36 kg/m^2 at the start of her pregnancy. She is previously healthy except for a moderate asthma. She is not using anti-asthmatic medicine regularly
Her blood pressure and urine are normal. The SF measure is following curve and the fetal heart rate 130 beats per minute (normal frequency). She has gained 3 kilos in weight the last 3-4 weeks (total weight gain 20 kilos), and she feels her body has “swollen up”.
Her coughing is non-productive and started the day before, quite suddenly. She has had the feeling of breathlessness for several weeks, but “now it has got worse”. She also has a stinging pain on the right side of thorax when she is coughing. Her pelvic pain has also become worse the last 2-3 days. Her temperature is 37.8 centigrades, pulse 98, regular. A slight systolic murmur is heard over the heart. Blood pressure is normal. At pulmonary auscultation the respiratory sounds are remote but appear normal. Both her legs are enlarged because of her adiposity and edemas. You think pulmonary embolism is the diagnosis to exclude first. You admit her to hospital as an emergency case, and pulmonary embolism is diagnosed. Also her pelvic vein on left side is filled with thrombi. Her clinical symptoms remained unchanged.
She was treated acutely with low molecular heparin, her birth was uncomplicated. After birth she was given warfarin which she used for a year. No genetic or acquired coagulation defects were detected.
One and a half year after her first birth she consults you because she is considering another pregnancy and wants to remove her IUD. Her BMI is now 38.
She followed your advice to postpone the pregnancy until she has lost weight, improved her nutrition and established regular physical activity. 12 months later her BMI is 34 and her lifestyle has improved. You remove her IUD and 6 months later she is 8 weeks pregnant for which reason she consults you.

Question 1:

What considerations do you have with respect to her current pregnancy?

Answer:

She needs prophylaxis with low molecular heparin against thrombosis (4p)
Encourage her to continue with her healthy diet and physical activity during pregnancy (2)

Give her acetylsalisylic acid (0p)
Refer her immediately to a specialist (1 p).