{username}

A 32-year-old female with no known psychiatric history is brought to psychiatry triage, after a complaint has been filed against her for a false accusation against her ex-partner. According to anamnesis, after she discovered that her partner was cheating on her, she contacted the police and told them he had pedophile contents on his computer. In her examination she cries, and says that after she discovered the betrayal, she was very angry and she made a false report to the police and now deeply regrets it. She notes that this type of behavior is not familiar to her from her past, she describes herself as a typically functional, easy-going and sociable woman, with no prior entanglements with the police.

Which of the following diagnoses is the most likely for this case?

- **a.** Oppositional Defiant Disorder
- **b.** Conduct Disorder
- **c.** Adjustment Disorder With Disturbance Of Conduct
- **d.** Antisocial Personality Disorder

2

{username}

A 33-year-old male, diagnosed with Attention Deficit Disorder (ADD) from childhood. Known drug abuse. Which of the following treatments is the most suitable for his condition?

- a. DEXTROAMPHETAMINE
- **b.** METHYLPHENIDATE
- c. LISDEXAMPHETAMINE
- d. ATOMOXETINE

{username}

A 30-year-old male with schizophrenia, history of recurrent hospitalizations due to significant psychotic symptoms, brought in for a fourth hospitalization in the last two years due to psychotic exacerbation. Prior treatment attempts with three different anti-psychotic medications in the standard of care doses have failed.

What is the next therapeutic step in this condition?

- a. Change to lithium (LICARBIUM)
- **b.** Add a preparation from the SSRI serotonin noradrenaline reuptake inhibitor class
- **c.** Add a preparation from the benzodiazepine class
- **d.** Change to CLOZAPINE

{username}

According to the DSM-5, which of the following most accurately describes the difference between Bipolar Disorder I and Bipolar Disorder II?

- a. Bipolar Disorder I is characterized by at least one hypomanic episode, with no manic episodes.
- **b.** Bipolar Disorder II requires at least one manic episode, but does not require depression episodes.
- **c.** Bipolar Disorder I requires at least one manic episode, with or without depression episodes.
- **d.**Bipolar Disorder II is characterized by manic episodes only, with no depression episodes.

{username}

A 28-year-old male comes in for a psychiatric evaluation and says: <Sometimes when I am alone at home, I hear a man9s voice talking about me. He says things like 8he failed again9 or 8he is worthless9. The voice sounds like he is in the room, but there is no one there.= The patient has no signs of confusion, no known substance abuse, and has been functioning poorly over the past year.

Which of the following diagnoses most accurately describes the case described?

- a. Pseudohallucination that characterizes a borderline personality disorder
- **b.** A normal hypnagogic hallucination that does not require treatment
- c. A psychotic auditory hallucination which is characteristic in schizophrenia
- **d.** An auditory illusion that is related to misinterpretation of an actual stimulation

6

{username}

A 29-year-old male arrives at the ER complaining of high-grade fever, severe confusion, tremor in hands, excessive sweating, fast pulse and high blood pressure.

The family recounts that he tried to stop drinking alcohol after many years of daily consumption. The patient reports a sensation of <ants=crawling on his skin and says he sees bugs crawling on the walls.

What is the most suitable immediate treatment?

- a. T.HALOPERIDOL
- **b.** T.LORAZEPAM
- c. T.METHYPHENIDATE
- d. T.FLUOXETINE

7 {username} Which of the following is the most characteristic of Neuroleptic Malignant Syndrome (NMS)? Usually appears between six months and one year after treatment with an antia. psychosis preparation b. Appears in 0.01-0.02% of the patients treated with an anti-psychosis preparation The mortality rate in NMS reaches 5% c. d. It appears more in elderly women than in young men 8 {username} Which of the following is the most correct concerning Hoarding Disorder? Lithium (Licarbium) treatment was found to be very effective a. Patients with this syndrome show good compliance to cognitive behavioral therapy b. (CBT) Among the other objectives of the treatment of the syndrome there is also the c. clearance of objects from the home and increasing living space Patients usually have insight and awareness regarding the behavior that causes

d.

hoarding

{username}

What is the <u>most accurate</u> statement describing changes in brain structure and function in schizophrenia patients compared to the general population?

- **a.** Lateral and third ventricular restriction
- **b.** Increased metabolic activity of the frontal lobe
- **c.** There is no difference in metabolic activity
- d. Structural changes in thalamus ganglia

10

{username}

What is the most correct regarding Panic Disorder with Agoraphobia?

- **b.** Good functionality before symptoms start is not related to a better prognosis
- **c.** Alcohol use that alleviates anxiety symptoms is normally related with a good prognosis
- **d.** Higher likelihood for suicide attempts

{username}

A 19-year-old boy, no underlying diseases, no substance abuse, appeared in the psychiatric clinic for the first time in his life with psychotic symptoms which include persecutory delusions and auditory hallucinations for the past two months. He functioned normally before the symptoms began. The clinic initiated treatment with an anti-psychotic preparation. About a month after this treatment started, he achieved full remission and returned to function fully much like his baseline function.

Which of the following diagnoses is the most likely and why?

- **a.** This is definitely a first psychotic episode of schizophrenia since treatment with an anti-psychotic preparation was initiated
- **b.** This is a brief psychotic disorder since he responded to the treatment very quickly
- **c.** This is an anxiety disorder since he returned to complete remission in less than 4 months
- **d.** This is a schizophreniform disorder since he returned to full functionality within less than 6 months

{username}

A 32-year-old woman seeks treatment due to anxiety attacks and recurring intrusive thoughts. She describes a pattern in which intrusive throughs come up again and again, and she feels the need to perform behavioral rituals (such as rechecking the oven or washing her hands) to reduce the stress. The therapist offers her a targeted treatment which includes gradual exposure to anxiety provoking situations while withholding the mitigating response (for example avoiding hands washing after contact with public surfaces), while monitoring the real-time anxiety reactions.

What type of treatment is described?

- **a.** Insight Oriented Dynamic Psychotherapy
- **b.** Cognitive Behavioral Therapy (CBT) with Exposure and Response Prevention (ERP)
- **c.** Mindfulness based treatment and stress reduction
- **d.** Trauma focused narrative therapy

13

{username}

A 25-year-old female, single, receives drug treatment for schizophrenia. Arrived due to amenorrhea and galactorrhea. Negative pregnancy test. Demands a change of the drug treatment.

Which of the following medications is recommended for this patient?

- a. PALIPERIDONE (INVEGA)
- **b.** ZIPRASIDONE (GEODON)
- c. ILOPERIDONE (FANAPT)
- d. ASENAPINE (SAPRIS)

$\{i\}$	ise	rn	a	m	ρ	ļ
1 4	Ju	,,,	u	•	L	ı

Which motor disorder usually appears as a side effect at a later stage of first generation anti-psychosis treatment?

- **a.** Muscle Stiffness
- **b.** Hand Tremor
- c. Cogwheel Rigidity
- **d.** Rabbit Syndrome

15

{username}

Which of the following medications might, with the highest probability, impair cognitive function in the elderly?

- a. FLUOXETINE
- **b.** CITALOPRAM
- c. ESCITALOPRAM
- **d.** PAROXETINE

{username}

A 53-year-old male, lives alone in a rented apartment in the outskirts of town.

He works night shifts as a doorman in an office building and does not engage in meaningful social relations outside work hours. During the clinical conversation he is polite, but answers in short sentences, mostly in a non-emotive manner, and initiates little in the conversation.

He describes himself as a <person who needs a lot of space=
and says he never felt the need to look for a romantic relationship or close friends.

There is no history of false ideation, hallucinations or drug abuse. His cognitive function is normal.

Which of the following diagnoses is the most likely in his condition?

- **a.** Paranoid personality disorder
- **b.** Schizotypal personality disorder
- **c.** Schizoid personality disorder
- **d.** Antisocial personality disorder

{username}

An 8-year-old boy presents with behavioral and social difficulties, stubbornness and difficulty adjusting to changes. His parents recount that from a young age he has been having sensory dysregulation and there is a need to mediate changes. In his examination, the child does not make eye contact, has verbal communication difficulties and speaks in a robotic manner.

Which of the following tools will most significantly promote the diagnosis?

- **a.** (ADOS-G) Autism Diagnostic Observation Schedule-Generic
- **b.** CONNERS rating scale
- c. HAMILTON
- d. MoCA- Montreal cognitive assessment

18

{username}

A 60-year-old male treated with lithium for bipolar disorder arrives at the ER with confusion, imbalance, gross tremor, arrhythmia and nystagmus. A short time later, a tonic-clonic seizure occurs and a blood tests shows evidence of significant renal failure.

Which of the following is the treatment of choice?

- a. T.OLANZAPINE
- b. IV. AMOXICILLIN
- c. Urgent hemodialysis
- $m{d.}$ Conservative treatment, oral administration of fluids and measuring blood lithium level

{username}

Which is the following is the most correct regarding treatment of Social Anxiety Disorder?

- **b.** Benzodiazepine use is prohibited
- *c.* ³-blockers are effective as treatment for performance anxiety
- **d.**Tricyclic medications (Tricyclic antidepressant) are recommended as an effective treatment for this diagnosis

20

{username}

A 26-year-old male with schizophrenia is hospitalized in a psychotic state, after not adhering to drug treatment. In the course of hospitalization, he receives treatment with high dose T.RISPERIDONE, but a few days later develops muscle rigidity, high-grade fever, tachycardia and blood pressure changes.

All of the following are suitable for the treatment of this condition except for:

- **a.** Cooling down, fluids, fever reduction
- **b.** T.AMANTADINE
- c. T.BROMOCRIPTINE
- d. T.PERPHENAZINE

{username}

A 15-year-old girl arrives for investigation following delayed puberty and amenorrhea. Height 143 cm, see attached image. Lab tests measure FSH = 82 mIU/mL and LH = 105 mIU/mL. Pelvis ultrasound demonstrates a small uterus and ovaries are not seen.



What is the most suitable step at this stage to promote the diagnosis?

- **a.** Ovarian reserve assessment
- **b.** Karyotype test
- **c.** Brain MRI
- **d.** Bone density test (DEXA)

{username}

A 34-year-old woman has been unsuccessfully trying to conceive for a year.

Describes a normal cycle of 29-30 days with clear premenstrual signs.

Her partner is normally healthy, had a varicocele repair surgery two years ago.

10 antral follicles were seen in a follicle test on day 3 of the cycle,
and the FSH level on day 3 was 7.8 mIU/mL.

The general practitioner refers her to continue investigation.

What is the next step in case management?

- **a.** Direct referral to IVF
- **b.** Testing the patient's androgen level in the blood
- **c.** Sperm test for the partner
- **d.** HysteroSalpingoGraphy HSG

{username}

A 38-year-old female, normally healthy, gestational week 6 following IVF treatments due to idiopathic infertility. Two embryos were transferred Currently arrived at the ER with complaints of right lower abdominal pains, nausea and vomiting. Ultrasonography shows normal gestational sac in the uterus, and also a mass in the right adnexum with free fluid in the Douglass pouch.

3-hCG levels are consistent with gestational age.

Which of the following complications is the most common in this case?

- **a.** Early miscarriage
- **b.** Hormone-dependent ovarian tumor
- **c.** Ovarian hyperstimulation syndrome
- **d.** Heterotopic pregnancy

{username}

A 75-year-old female arrives the clinic complaining of a <lump between the legs=, no urinary complaints. Observational examination - see photo.

The diagnosis grade is as follows - anterior wall level 3, posterior wall level 2, apical compartment level 1-2, negative cough test.



Which of the following treatments is the most effective for her?

- **a.** Kegel exercises
- **b.** Pessary
- **c.** Progesterone
- d. TVT-O

{username}	
lascritatiici	

A 22-year-old female comes in for a routine check-up and asks for recommendations for early detection of cervical cancer. When would be right to tell her?

- **a.** There is no need to begin screening tests before the age of 30
- **b.** A cytological test is better than an HPV test
- **c.** Over the age of 30, it is recommended to have a combined test (cytology and serology) once every 5 years
- **d.** If she was inoculated for HPV, there is no need to perform a screening test

26

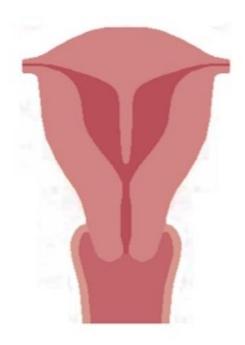
{username}

During a laparoscopic hysterectomy, the surgeons want to check that the ureter was not damaged. Which of the following tests will best serve this objective?

- **a.** Filling the bladder with saline
- **b.** Cystoscopy
- c. CT Urogram
- **d.** Identify peristaltic motions where the ureter enters the pelvis

{username}

Which complication in pregnancy can be caused by the condition described in the image?



- a. Oligohydramnios
- **b.** Placenta Previa
- c. Placental abruption
- **d.** Multiple pregnancy

{username}

A 29-year-old female sees the gynecologist for consultation following a spontaneous miscarriage at gestational week 7 and asks about the possible etiologies.

What is the chance that it is a fetal chromosomal anomaly?

- **a.** About 15%
- **b.** About 30%
- **c.** About 50%
- **d.** About 75%

29

{username}

A healthy 31-year-old woman, gestational week 36, visits the general practitioner after losing consciousness while watching TV lying on her back. Her partner reports that she was pale for about a minute and regained consciousness spontaneously.

She has no pains, fetal movements are normal, and blood pressure in examination is 90/55.

What is the most likely explanation for the phenomenon?

- **a.** Supraventricular Arrythmia
- **b.** Aortic Dissection
- **c.** Supine Hypotensive Syndrome
- d. Dehydration

{username}

A 59-year-old woman visits the general practitioner complaining of vaginal dryness, local itch and burning sensation when urinating. Amenorrhea for about 9 years.

Gynecology examination demonstrated reduced vaginal tissue elasticity, mild redness.

Does not take hormone treatment.

What is the most suitable first-line treatment?

- a. Systemic low-dose progesterone
- **b.** Topical estrogen cream
- **c.** Anticholinergics to treat urinary urgency
- **d.** Fluoxetine (Prozac) to treat the burning sensation

31

{username}

29-year-old female, gestational week 39, arrives in maternity triage complaining of lower abdomen cramps that have been increasing in intensity every 5 minutes for the past 4 hours. She reports of pressure in the pelvis and a mucosal secretion with a streak of blood. Examination: vital signs are normal, feels fetal movements.

Which of the following findings will support the fact that this is the beginning of labor?

- **a.** Rupture of the membranes with clear fluid a few hours ago
- **b.** Vaginal bloody show
- **c.** Regular contractions accompanied by cervix changes
- **d.** Feeling particularly strong fetal movements

{username}

A 29-year-old postpartum woman visits the general practitioner 48 hours after a normal vaginal delivery. She reports of red vaginal bleeding, moderate amount, no pains.

No fever, normal pulse and normal blood pressure.

Gynecological examination: involuted uterus, non-tender, closed cervix, mild bleeding.

What is the most suitable approach to manage the case?

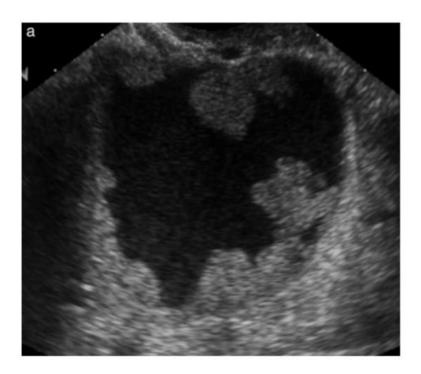
- **a.** Start empirical Augmentin treatment
- **b.** Explain this is a normal physiological process
- **c.** Refer urgently to gynecology triage
- **d.** Perform an ultrasound to rule out retained placenta

{username}

A 65-year-old female comes in with complaints of abdominal pains.

Gynecology US demonstrates a finding in the ovary - see image, and in addition free fluid in the pelvis and abdomen. Biomarker test - CA-125=560 (norm is up to 35).

Chest-abdomen-pelvis CT - no other findings except for slightly enlarged pelvic lymph nodes.



What should be the next step in the management of the case?

- a. MRI
- **b.** Targeted radiation to the pelvis (brachytherapy)
- **c.** Platinum-based chemotherapy
- **d.** Surgical staging & cytoreduction

{username}

A 23-year-old female receives the following pathological result from a surgical uterine evacuation in the diagnosis of a missed abortion in a first pregnancy:

Focally hydropic villi and mild focal hyperplasia of trophoblasts.

The genetic result from the material is 69XXY.

A US of the pelvis in the clinic shows normal size and appearance of uterus, normal mucosa 5 mm and ovaries of normal size and appearance.

What will be the doctor's recommendation following these results?

- **a.** Monitor BHCG levels over time
- **b.** Whole-body CT
- c. Liver ultrasound
- **d.** Diagnostic hysteroscopy

{username}

A 35-year-old female arrives at the ER with complaints of fever and pain in the lower abdomen for the past week following pregnancy termination using dilation and curettage.

Examination - fever 39°C, BP 110/90, pulse 90, lower abdomen is more sensitive on the right, prominent cervical motion tenderness and a green secretion.

Pelvis US demonstrates the finding in the image, to the right of the uterus.



What will be the next step?

- **a.** Hospitalization for treatment with parenteral broad spectrum antibiotics
- **b.** Abdominal X-ray without a contrast agent
- **c.** Exploratory laparoscopy
- **d.** Percutaneous puncture of the finding in the image

{username}

A 28-year-old female, 12 weeks pregnant, comes in for the ultrasound, result described in the image.



What is the purpose of the test?

- **a.** Determine the pregnancy's accurate age
- **b.** Aneuploidy risk assessment
- **c.** Assessing the risk for preeclampsia
- **d.** Assessing intrauterine growth restriction

{username}

A routine pregnancy follow-up in week 33 diagnosed a fetus that is small relative to gestational age, with weight assessment in the 4th percentile.

A full investigation focused on this diagnosis was normal.

What will you recommend the woman concerning the rest of the pregnancy?

- **a.** A weight assessment once a week
- **b.** NST fetal monitoring once a day
- **c.** Daily monitoring of fetal movements
- **d.** A biophysical profile (BPP) once every two weeks

38

{username}

A 29-year-old female, married, no children, visits the gynecologist for a 3-month check-up after the insertion of a copper intrauterine device. Does not have pains or bleeding. In gynecological examination, the strings in the cervix are not observed.

What is the recommended test to verify the position of the device?

- **a.** Hysteroscopy
- **b.** Vaginal US
- **c.** Abdominal X-ray without a contrast agent
- d. Diagnostic laparoscopy

{username}

What is the most common reason for Cesarean Hysterectomy?

- **a.** Cervical atony
- **b.** Uterine rupture
- **c.** Enlarged myomatous uterus
- **d.** Placenta accreta

40

{username}

A 31-year-old female before her fourth delivery, hospitalized in week 25 due to premature rupture of membranes. Treated with steroids and antibiotics as per standard of care. 10 days later there was rupture of membranes with a foul odor, fever 39 °C, baseline fetal pulse in monitoring 185, occiput anterior position according to US, cervix dilation 1 cm.

What is the next step in case management?

- **a.** Emergency cesarean section
- **b.** Administration of broad spectrum combination antibiotics and monitoring
- c. Inducing vaginal labor
- **d.** Administer another course of steroids and induce labor after 48 hours

{username}

Following a family history of colon cancer in the father and grandfather, a 48-year-old patient undergoes an elective genetic test (the patient has no complaints) and receives the results of being a carrier or Lynch syndrome.

What is the most correct recommendation for her?

- **a.** Ovarian ultrasound follow-up
- **b.** Monitor blood CA-125 level
- **c.** Abdomen and pelvis CT
- **d.** Total hysterectomy with bilateral salpingo-oophorectomy

42

{username}

You were called to treat a postpartum woman with increased lochia.

After examination of the uterine cavity and the birth canal, the bleeding continues.

Embolization of the uterine arteries is considered.

What is the necessary condition for choosing this approach over a surgical approach?

- **a.** The woman is not interested in another pregnancy
- **b.** Hemodynamic stability
- c. No fever
- d. Hemoglobin over 10 g/dL

{username}

A 16-year-old girl visits the general practitioner due to primary amenorrhea.

She reports normal development of breasts and pubic hair. She has no abdominal pains.

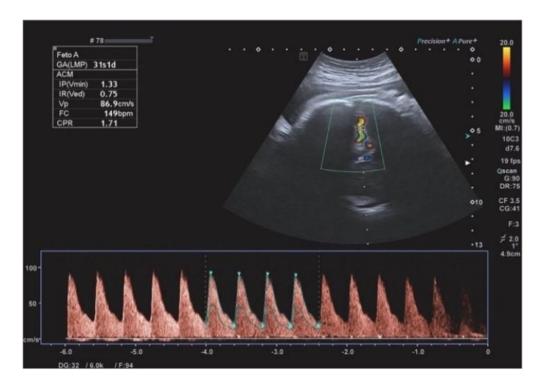
Physical examination - developed breasts, Tanner stage 4, normal height,
no uterus was demonstrated in an ultrasound scan.

Which of the following diagnoses is the most likely?

- **a.** Premature Ovarian Insufficiency
- **b.** Asherman Syndrome
- **c.** Mullerian Dysgenesis
- **d.** Kalman Syndrome

{username}

A 30-year-old female, mother of 3, gestational week 24, was in contact with her son who has PARVOVIRUS. Maternal serology blood test found positive parvovirus IgM and IgG. A Doppler obstetric ultrasound is performed in a weekly check-up, as described in the image. Significant high speed flow was measured in the artery shown in the image.



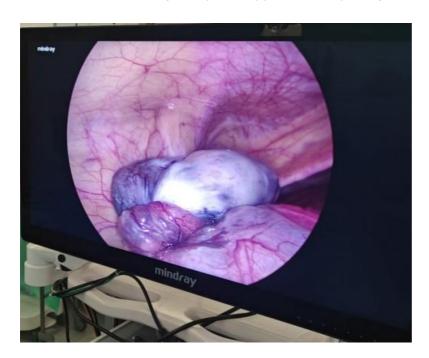
What is the most likely interpretation of the finding?

- **a.** Evidence of increased intracranial pressure
- **b.** A finding characteristic of a chromosomal disorder
- **c.** An indirect index of fetal anemia
- **d.** Evidence of fetal cerebral ischemia

{username}

A 28-year-old female, gestational week 19, arrives at the ER with sharp pains in the right lower abdomen, with a sudden onset. Physical examination reveals sensitivity in right lower abdomen. Ultrasound demonstrates an ovarian mass with decreased blood flow.

It is decided to do an urgent laparoscopy, where the finding in the image is demonstrated.



What is the most important action to perform during the surgery at this stage of the pregnancy?

- **a.** Use of 20 mmHg intra-abdominal pressure
- **b.** Use regional anesthesia for the surgery
- **c.** Entry through an open approach above the umbilicus
- **d.** Continuous fetal monitoring during the surgery

{username}

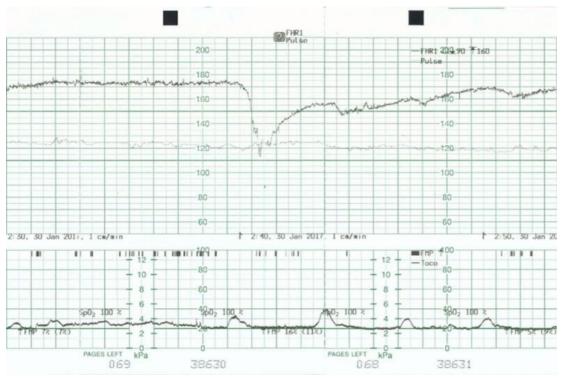
A 30-year-old female, gestational week 34, with type 1 diabetes since the age of 14, arrives at the ER with vomiting and abdominal pains for the past two days. Her husband notes that she is a little confused. Examination: pulse 115, blood pressure 100/65, fast and deep breaths. Lab tests:

pH: 7.18

Bicarbonate: 12 mEq/L
 Glucose: 340 mg/dl
 Urine ketones ++

Blood ketones: positivePotassium levels: 4.4 mEq/L

Fetal monitoring is shown in the image:



What is the next step of treatment?

- **a.** Intravenous administration of potassium and bicarbonate
- **b.** Immediately induce labor
- **c.** Administer steroids to help fetal lungs mature
- **d.** Intravenous administration of fluids and insulin

{username}

A 34-year-old woman arrives at the fertility clinic after two years of failed attempts to conceive. Her partner measured a sperm count of 2 million motile sperm cells per ml.

Attached is an image of hysterosalpingography performed in investigation of infertility.

The patient had three rounds of IVF which resulted in good quality fetuses but a pregnancy was not achieved.



What is the most suitable therapeutic option to improve the chance of fertilization and pregnancy at this stage?

- **a.** Another round of IVF with a higher dosage of gonadotropins
- **b.** Switch to intrauterine insemination (IUI) with ovulation induction
- **c.** Salpingectomy before continuing treatment
- **d.** Administration of GnRH antagonists instead of agonists in the next treatment round

{username}

A 28-year-old female and mother of a child was referred to gynecology triage due to a 10-day delay of menses, blood beta level of 1500 mIU/ml, and no gestational sac in the uterus in an ultrasound test.

Upon her admission - relaxed, normal vital signs, soft abdomen. Ultrasound demonstrated a finding consistent with an ectopic pregnancy in fallopian tube, no free fluid in the pelvis. It was decided to administer methotrexate. On day 4 of methotrexate administration, the value of 1800 mIU/mI was received in a beta blood test, and on day 7 the blood beta was 1700 mIU/mI. The patient is without complaints.

What is the next step in case management?

- **a.** Another dose of methotrexate
- **b.** Diagnostic dilation and curettage
- c. Laparoscopic salpingectomy
- **d.** A beta hCG test in one month

{username}

During an ultrasound test in gestational week 12, the following image is demonstrated.



What is the most common complication in this condition?

- **a.** Preterm Delivery
- **b.** Twin-to-Twin Transfusion Syndrome (TTTS)
- **c.** Cord Entanglement
- **d.** Intrauterine Fetal Demise

{username}

A 30-year-old woman, married + 3, normally healthy, arrives at the clinic complaining of intermittent lower abdominal pain for the past six months, primarily on the left. In examination, fullness was palpated in the left adnexum, and in pelvis ultrasound, a finding with an appearance consistent with a Mature Cystic Teratoma 7 cm in diameter. Markers test - all are normal except for CA 19-9=80 (norm up to 35).

When would be right to recommend to the patient?

- **a.** Conservative follow-up once every 3-6 months
- **b.** Whole body CT
- **c.** Laparoscopy to remove the ovarian finding
- d. Laparoscopic adnexectomy, frozen section and surgical grading accordingly

51

{username}

A 10-year-old boy was hospitalized due to fever with several diarrhea episodes, the diarrhea is with blood. PCR contains evidence for Salmonella enterica (nontyphoidal). The baby is in good general condition, eats well, no signs of dehydration.

What is correct regarding the management of this case?

- **a.** Antibiotics can be avoided at this stage
- **b.** Ceftriaxone for 5 days
- c. Gentamycin for 3 days
- **d.** Metronidazole for 10 days

{username}

A two-month-old girl, unconscious. In her examination, she is limp, pale, pulse 58 beats per minute and superficial breaths. The team initiates an Ambu mask ventilation with oxygen, but the heart rate is not increasing.

What is the <u>next step</u> in case management?

- **a.** Wait a few minutes and re-evaluate
- **b.** Start IV amiodarone
- **c.** Start resuscitation with chest compressions and ventilations
- **d.** Start intramuscular adrenalin administration

{username}

A 7-year-old boy presented in due to high frequency of urination, accompanied by copious hydration, the mother notes he drinks about 3 liters a day. As part of investigation, the blood tests described in the table are collected:

Norm values	Result	Test type
7.35-7.45	7.37	Blood pH
21-28	24.2 nmol/l	Blood HCo3
70-100	99 mg/dl	Glucose
-	No evidence of ketones	Stick urinalysis
135-145	149 nmol/l	Blood sodium
-	310	Blood osmolarity
-	280	Urine osmolarity

Urine osmolarity increases and blood osmolarity decreases in reaction to vasopressin administration.

What is the child's likely diagnosis?

- a. Central diabetes insipidus
- **b.** Nephrogenic diabetes insipidus
- **c.** Syndrome of inappropriate ADH secretion
- **d.** Diabetes mellitus

{username}

A 14-year-old boy, has had recurring headaches for about a year. Pulsating pains, mostly bilateral, accompanied by nausea and photosensitivity. The episodes occur twice a weak, sometimes after stress at school or skipping a meal. Lately, the boy has been avoiding social activities, fearing an episode. The pediatrician is considering initiation of acute treatment during an episode.

Which of the following medications is the most suitable?

- a. Riboflavin
- **b.** Amitriptyline
- c. Rizatriptan
- **d.** Propranolol

{username}

A two and a half-year-old boy has been complaining of back pain for a week. His parents note that he refrains from walking, refuses to sit down, no fever. Physical examination - increased back muscle tone (paraspinal spasm) and limitation in spinal mobility. The collected blood tests are presented in the table. No anormal findings were seen in a spine X-ray.

Norm values	Measured value	
4500-13500	11500	WBC
1500-8000	7500	Neut.
10.5-13.5	11.8	Hgb
150000-450000	450000	PLT
0.5>	4.5	CRP
20>	40	ESR

Which of the following tests is the most diagnostic and <u>sensitive</u> to promote the diagnosis?

- **a.** Bone scintigraphy
- **b.** Full length spine X-ray
- c. Spine MRI
- **d.** Lower spine ultrasound

{username}

A newborn, full-term, started suffering from respiratory distress a few hours after his birth. Examination - hyperventilating and sighs, uses auxiliary muscles, impression of abdominal respiration. Lung auscultation - bowel sounds are heard.

Chest X-ray - the finding in the attached image is demonstrated.



What is the newborn's likely diagnosis?

- **a.** Necrotizing Enterocolitis
- **b.** Respiratory distress syndrome
- **c.** Congenital diaphragmatic hernia
- **d.** Spontaneous pneumothorax

{username}

A 16-year-old male complains of chronic tiredness and bone pains for about a year.

Hepatosplenomegaly in physical examination. Normal eye examination. Lab tests:

normocytic anemia and thrombocytopenia. X-rays of the distal femur as described in the image.



What is the most likely diagnosis?

- **a.** Leukemia
- **b.** Gaucher disease
- c. Sickle cell anemia
- **d.** GM3 gangliosidosis

{username}

A 10-months-old boy with developmental regression, difficulty eating and episodes of apnea that have recently appeared. Breastfed. The mother observes a poor rice-based nutrition. In his examination, his crying is hoarse and there is also evidence of hypotonia. Lab tests show metabolic acidosis. MRI shows enhancement in basal ganglia bilaterally.

What immediate treatment is recommended in this situation?

- a. Oral iron
- **b.** IV vitamin B1
- **c.** High dose vitamin D
- **d.** IV vitamin C

59

{username}

A 15-year-old girl, has been complaining for two weeks of hand twitches in the morning hours, which make her drop things. EEG demonstrated 4-5 Hertz poly-spike and slow wave.

What is the most likely diagnosis?

- **a.** Progressive myoclonic epilepsy
- **b.** Juvenile myoclonic epilepsy
- **c.** Childhood absence epilepsy
- d. Myoclonic-atonic epilepsy

{username}

A full-term female newborn, stopped breathing after her birth, loses tonus and has cyanosis. Examination - no respiration and no response to stimuli, pulse 70 beats per minute.

What is the next step in case management?

- **a.** Positive pressure ventilation
- **b.** Electrical cardioversion
- **c.** Heart massage
- **d.** Adrenalin administration

61

{username}

A 15-year-old girl is hospitalized due to bradycardia. Measured BMI - 15. Evidence of amenorrhea in anamnesis. Lab tests: low levels of LF/FSH, hypoglycemia and mild neutropenia. ECG shows prolonged QT interval. Echocardiography shows small amount of pericardial fluid.

Which disease is the most likely?

- **a.** Hypothyroidism
- **b.** Addison's disease
- c. Anorexia Nervosa
- **d.** Hypoparathyroidism

{username}

A 7-year-old girl with iron deficit anemia started oral iron treatment with iron sulfate at a therapeutic dosage. 4 days later repeat blood tests were performed.

What is the earliest lab sign that can be expected and indicate treatment efficacy?

- **a.** Increase in hemoglobin level
- **b.** Increase in ferritin level
- **c.** Increase in number of reticulocytes
- **d.** Increase in number of erythrocytes

63

{username}

A two-day-old baby is examined for poor appetite, sleepiness and apathy.

Tests as described in the table. Urinalysis demonstrated elevated uric acid.

Norm values	Measured value	
7.35-7.45	7.55	Ph
35-40	25	PCO2
22-26	24	BiCarbonate
80-120	200	Ammonia

What is the most likely diagnosis?

- **a.** Methylmalonic acidemia
- **b.** Carbamoylphosphate synthase deficiency
- **c.** Ornithine transcarbamylase (OTC) deficiency
- d. Galactosemia

{username}

A 4-year-old girl, healthy up until now, presented due to tiredness, pallor and bleeding from gums. In anamnesis: viral disease two weeks ago. Examination: pale, fast pulse, spleen not palpated. Blood tests, as described in the table:

Norm values	Measured value	
4500-13500	1700	WBC
10.5-13.5	6.2	Hgb
150000-450000	25000	PLT
0.9-4	0.5	Reticulocyte

What is the most likely diagnosis?

- **a.** Acute lymphoblastic leukemia
- **b.** Aplastic anemia
- c. Sickle Cell Anemia
- **d.** Hemolytic uremic syndrome

{username}

A 5-year-old girl arrives at the ER due to cola-colored dark urine and edemas in the lower extremities. Microscopic urinalysis shows erythrocyte casts. Lab tests as described in the table:

Norm values	Measured value	
10-38	40	Urea
0.25-0.75	0.8	Creatinine
	Low	С3
	Normal	C4

What is the most likely cause of the child's condition?

- **a.** Recent Group A streptococcus infection
- **b.** Extended treatment with NSAIDs group drugs
- **c.** Uncontrolled hypertension
- **d.** Tendency for thrombophilia

{username}

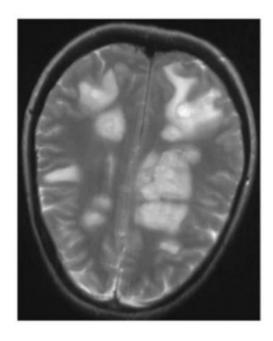
A 9-year-old girl visits the doctor due to pallor, tiredness and glossitis. In anamnesis, she is on a vegetarian diet with limited food types. Blood tests: Hgb 9 mg/dL (normal over 11), MCV 115 fL (normal 80-90)

Which nutritional component is most likely to be deficient in her diet?

- **a.** Folic acid
- **b.** Iron
- c. Vitamin B12
- **d.** Vitamin E

{username}

A 6-year-old girl is admitted to the ER due to reduced consciousness, bilateral weakness and ataxia, following a mild viral disease. Brain MRI showed the findings in the image.



What is the most suitable treatment for her condition?

- **a.** Broad spectrum antibiotics
- **b.** High dose steroids
- **c.** Anticonvulsants
- **d.** Azathioprine

{username}

A one year and nine month-old boy is brought to the doctor's office for examination because he has not started walking yet and he is also not standing independently yet. Background: two episodes of long-bone fractures due to minor traumas. Examination: the findings in the image and also joint hypermobility. No findings are suggestive of abuse.



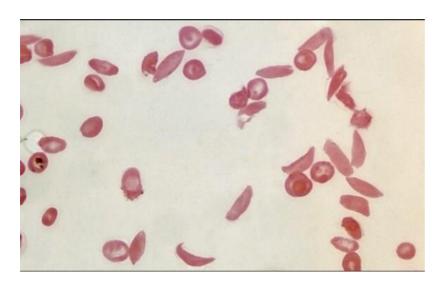
Which of the following diagnoses is the most likely?

- **a.** Nutritional rickets
- **b.** Osteogenesis Imperfecta
- **c.** Hypophosphatasia
- **d.** Ehlers-Danlos syndrome

{username}

A one year and two month-old girl, vaccinated according to age, hospitalized due to fever, dyspnea, reduced saturation and opacity in the chest X-ray.

Blood smear describes the findings in the image:



Blood tests:
WBC 3 12,500/mm³
Neutrophils- 77%
Hb- 6.5 g/dL
Platelets 3 200,000/mm³

Which of the following combination of drugs is a part of the standard of care for girl's <u>acute</u> diagnosis?

- **a.** Methotrexate and IVIG
- **b.** TNF-³ inhibitor and oxygen
- **c.** Antibiotics and IV fluids
- **d.** Fresh Frozen Plasma and steroids

{username}

A 4-year-old girl complains of pains and limited mobility of right hand after her older brother pulled her hand in a sudden manner. Examination: drooping right hand. No evidence of fracture on X-ray.

What is the most likely diagnosis?

- **a.** Distal radius fracture
- **b.** Lateral collateral ligament tear
- c. Mild shoulder joint deformity
- **d.** Pulled elbow

71

{username}

Which of the following combinations of lab findings is typical for adrenal failure (choose the most accurate answer)?

- **a.** Hypoglycemia, hyponatremia, hypokalemia
- **b.** Hyperglycemia, hypernatremia, hyperkalemia
- **c.** Hypoglycemia, hyponatremia, hyperkalemia
- **d.** Hyperglycemia, hyponatremia, hypokalemia

{username}

Below are the results of a patient's blood serology tests

Total ANTI-HBc - positive Anti HBs - positive HBV DNA - negative HBsAG - negative

Which of the following definitions most accurately describes his condition?

- **a.** Vaccinated, never infected
- **b.** Acute HBV infection
- c. Chronic HBV infection
- **d.** Recovered from past infection

73

{username}

A 5-year-old boy with a history of seizures from infancy, developmental delay and hypotonia, referred to brain MRI.

Examination demonstrated cortical tubers and subependymal subventricular lesions.

What is the most likely diagnosis?

- a. Neurofibromatosis type 1
- **b.** Tuberous sclerosis
- c. Canavan disease
- **d.** Fabry disease

{username}

A 7-week-old boy, has been having watery diarrhea with blood drops, several vomiting episodes and agitation episodes for about a week. Background of breastfeeding and in the past week baby formula has been added to his diet. Examination: no fever, alert and vital.

In relation to his condition, what is the best way to confirm his diagnosis?

- **a.** Blood eosinophils level
- **b.** FOOD SKIN PRICK TEST
- c. Specific IGE level in the blood
- **d.** Improvement of symptoms after change of diet

75

{username}

A 13-year-old girl has been complaining of abdominal pains for several months, which worsen after meals. In her examination, epigastric tenderness. Evidence of microcytic anemia in blood test.

Which of the following is the likely pathogen causing her condition?

- **a.** Helicobacter pylori
- **b.** Salmonella Typhi
- c. Campylobacter jejuni
- d. Entamoeba

{username}

A 1-year-old boy that for the past two months has had recurring events of high-grade fever accompanied by abdominal pains, vomiting and diarrhea. The episodes last about 5 days.

The parents are healthy, born in Finland. The child has come in now with another episode. Physical examination: lymph nodes enlargement and also the findings described in the photos (please refer to the finding in the first photo even though the leg does not belong to a 1-year-old boy).





What is the most likely diagnosis?

- **a.** Familial mediterranean fever
- **b.** Behcet's disease
- c. Hyper IgD Syndrome
- **d.** Systemic lupus erythematosus

{username}

An 18-month-old boy, history of steveral otitis events, diarrhea due to Cryptosporidium infection and skin warts (verruca vulgaris). Investigation found a normal number of B cells, normal number of T cells, and a normal lymphocyte reaction to mitogen, but a low number of B CD27 cells.

Which of the following tests will most likely promote his diagnosis?

- **a.** Complement levels
- **b.** Immunoglobulin levels
- c. Natural Killers levels
- **d.** Eosinophil levels

{username}

A 9-year-old boy with persistent cough, chronic rhinitis and recurrent otitis. A chest X-ray is attached.



What is the likely diagnosis?

- a. Cystic fibrosis
- **b.** Goodpasture's syndrome
- c. Alport syndrome
- **d.** Primary ciliary dyskinesia

{username}

A 3-year-old girl, burnt by boiling water. In her examination, red skin with blisters in the forearm. The girl is alert, no other signs of distress. The burn is spread over less than 5% of the body area.

What is the most correct recommendation for further case management at this stage?

- **a.** Administration of prophylactic antibiotics
- **b.** Covering the area with a non-adhesive pad
- **c.** Referral to the burns center for continued treatment
- **d.** Draining the blisters without dressing

{username}

A 13-year-old boy was referred to assessment due to significant slowing down of growth in the past year. He complains of intermittent abdominal pains, rules out diarrhea.

Microcytic anemia in blood count. Physical examination - the finding described in the image.



Which of the following tests will support his likely diagnosis?

- **a.** High fecal calprotectin levels
- **b.** High fecal Lactoferrin levels
- **c.** Low blood Ceruloplasmin levels
- **d.** High blood Lipase levels

{username}

A 3-year-old boy arrives at the ER due to fever, tiredness and the finding seen in the picture, which appears in several places over his body. Physical examination: enlarged liver and spleen, pallor. Blood test, as described in the table:

Norm values	Measured value	
4500-13500	42000	WBC
10.5-13.5	7.2	Hgb
150000-450000	45000	PLT

Lymphoblasts are seen in a blood smear



What is the next step in the investigation of the case?

- **a.** Blood culture
- **b.** Bone marrow test
- c. EBV antibodies test
- **d.** G6PD test

{username}

A two-year-old toddler was referred to the ER due to stridor. Has had rhinitis and fever for the past 3 days. Attached is a neck X-ray with the finding marked (with an arrow).



Which of the following pathogens is common for his likely diagnosis?

- **a.** Parainfluenza virus
- **b.** Escherichia coli
- c. Sapo virus
- **d.** Campylobacter jejuni

{username}

A 6-week-old boy, his parents are first cousins, was examined for congenital hypotonia. In his examination, alert and demonstrates gaze following, no reflexes, tongue fasciculations and in addition, a finding that appears in the attached image:

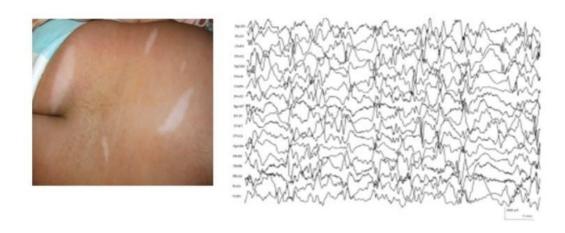


What is the baby's likely diagnosis?

- **a.** Duchenne muscular dystrophy
- **b.** Fragile X Syndrome
- **c.** Achondroplasia
- **d.** Spinal Muscular Atrophy

{username}

A 10-month-old boy is referred for investigation due to recurring episodes of cramps in extremities. Congenital skin defects, attached in the following photo are seen in the examination. The EEG test is also attached.



Which of the following diagnoses is the most likely?

- **a.** Neurofibromatosis type 1
- **b.** Incontinentia pigmenti
- **c.** Sturge-Weber syndrome
- **d.** Tuberous sclerosis complex

{username}

A 1-year-old boy with recurrent pneumonia due to Streptococcus Pneumonia infection. Underlying atopic dermatitis, significant hemorrhage following circumcision and also several dermal infections. The collected blood tests are described in the table below:

Norm level	Measured level	Measured value
150000-450000	115000	PLT
40-120	30	IgM mg/ml
400-1100	750	IgG mg/ml
20	100	IgA mg/ml
0-60	120	IgE IU/ml

What is the most reasonable recommended treatment in this case?

- a. Steroids
- **b.** IVIG
- c. anti TNF ³
- **d.** Splenectomy

{username}

A 4-year-old boy is examined due to headaches for several weeks and vomiting in the mornings. Examination: imbalance, nystagmus and ataxia. Brain MRI shows a cystic finding in the cerebellum with a solid component showing enhancement after contrast agent injection.

What is the most likely diagnosis?

- a. Medulloblastoma
- **b.** Pilocytic astrocytoma
- c. Neuroblastoma
- **d.** Craniopharyngioma

87

{username}

A 7-year-old boy comes in for consultation due to difficulty concentrating, hyperactivity and aggressive (impulsive) behavior at school and at home. The teacher reports difficulty sitting in one place, tendency to interrupt the lessons and difficulty completing assignments. The parents note that these behaviors are present since kindergarten.

What is the most likely diagnosis?

- **a.** Attention-deficit/hyperactivity disorder (ADHD)
- **b.** Obsessive-compulsive disorder (OCD)
- c. Generalized anxiety disorder
- **d.** Autism spectrum disorder (ASD)

{username}

A one-year-old toddler with significant failure to thrive, suffers from recurring dehydration events characterized by a laboratory picture of metabolic alkalosis, hypochloremia and hypokalemia.

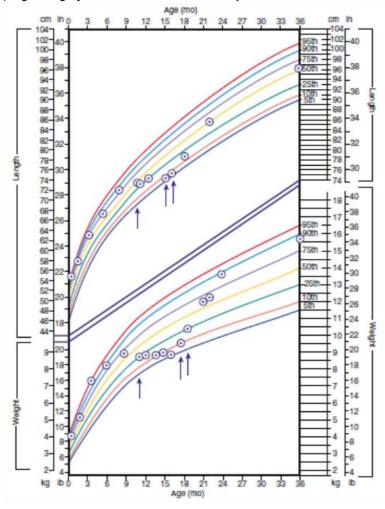
What is the likely diagnosis of the toddler?

- **a.** Alport syndrome
- **b.** Renal tubular acidosis
- **c.** Nephrotic syndrome
- **d.** Bartter syndrome

{username}

Attached are growth charts of a 3-year-old toddler, who has been suffering from abdominal pains accompanied by diarrhea, vomiting, poor eating and irritability (agitation episodes).

Attached is the growth chart of the toddler before and after initiation of treatment for his likely disease (beginning of intervention is marked by a double arrow on the graph).



What treatment did the toddler probably receive?

- a. Oral iron
- **b.** Growth hormone
- c. Low-lactose diet
- d. Gluten-free diet

{username}

A 5-year-old boy visits the doctor due to fever for the past two weeks, tiredness, weakness and bleeding from gums. Examination: pale, cervical lymph nodes are enlarged, enlarged spleen and sensitivity in the long bones.

Blood tests as described in the table

Norm values	Measured value	
4500-13500	2000	WBC
1500-8000	600	Neut.
2000<	1100	Lymph
10.5-13.5	7.8	Hgb
150000-450000	35000	PLT
0.5>	4	CRP

Blood smear: normal and no blasts.

Which of the following tests will most likely promote you concerning the child's disease?

- **a.** Blood culture
- **b.** Bone marrow test
- c. EBV and CMV serology test
- **d.** G6PD test

{username}

A 5-day-old newborn, referred to the ER after reporting an abnormal result of thyroid blood test as part of newborn screening. Repeat test in the ER resulted in the following values:

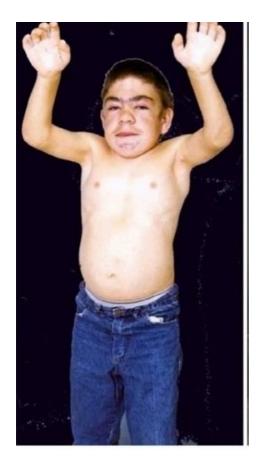
TSH - 100ulm/ml (0.5-10) FT4 - 9pmol/l (12-26)

Which of the following causes is the most common for the newborn's likely diagnosis?

- **a.** Maternal hyperthyroidism
- **b.** Hypothyroidism treatment given to the mother during pregnancy
- **c.** Impaired fetal development (Dysgenesis) of the newborn's thyroid
- **d.** Presence of thyroid antibodies in the baby

{username}

An 11-year-old boy (image attached), known developmental delay. Physical examination: systolic heart murmur, hepatosplenomegaly, joint rigidity and short stature. Brain MRI found mild hydrocephalus. No corneal opacity. There are several boys with a similar condition in the family.

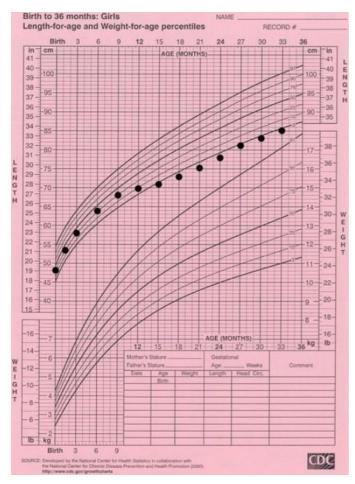


What is the most likely diagnosis?

- **a.** Williams Syndrome
- **b.** Prader Willi Syndrome
- **c.** Angelman Syndrome
- d. Mucopolysaccharidosis II

{username}

A 14-year-old boy comes in for developmental assessment due to short stature. In terms of weight - above the 20th percentile. Height chart until the age of 3 years is enclosed. Since the age of 3 years, continues to be in the 3rd percentile in terms of height. Examination - puberty signs - Tanner stage 1. In family anamnesis, the father started shaving at the age of 18 years. Hand X-ray shows a delay of about two years in bone age.



What is the adolescent's likely diagnosis?

- **a.** Familial short stature
- **b.** Turner syndrome
- **c.** Constitutional growth delay
- d. Klinefelter syndrome

{username}

A 6-year-old boy, bitten on the arm by a dog. Examination one hour after the event: surface wound that is not large, with irregular margins and no signs of infection.

Normal vaccination history, the dog is inoculated and is supervised by its owners.

What is the most important initial step when treating a bite wound?

- a. Start topical antibiotics treatment
- **b.** Disinfect the wound with an iodine based agent
- **c.** Thorough irrigation of the wound with sterile saline
- **d.** Preliminary suture of the wound to prevent scarring

{username}

A 5-year-old girl is hospitalized with fever for the past two weeks, suspected systemic Juvenile idiopathic Arthritis. In the past two days her condition worsened, she appears sick, in her examination now, evidence of lymph nodes enlargement and also hepatosplenomegaly.

The findings of the lab tests upon her hospitalization are described in Table 1.

The findings of the lab tests taken upon the exacerbation of her condition are described in Table 2.

Table 1

Norm values	Measured value	
4500-13500	17000	WBC
11.5-13.5	12.1	HgB
150000-450000	200000	PLT
200-400	300	Fibrinogen
3.5-5.4	3.8	Albumin
35>	30	AST
0.5>	6	CRP
20>	90	ESR
150>	100	Triglycerides

Table 2

1 4010 2		
Norm values	Measured value	
4500-13500	18900	WBC
11.5-13.5	10.2	HgB
150000-450000	110000	PLT
200-400	250	Fibrinogen
3.5-5.4	3.1	Albumin
35>	80	AST
0.5>	10	CRP
20>	40	ESR
150>	200	Triglycerides

Which of the lab findings collected at the time of the exacerbation will support her likely diagnosis?

- **a.** Decrease in hemoglobin levels
- **b.** Decrease in blood sedimentation rate
- **c.** Increase in CRP level
- **d.** Increase in leukocytes number

{username}

Which of the following conditions is a risk factor for Sudden infant death syndrome?

- **a.** Female gender
- **b.** Breastfeeding diet
- c. Use of a hard mattress
- **d.** Sleeping on the stomach

97

{username}

A 4-year-old boy, pallor, weakness and tiredness appeared in the last 24 hours. About a week ago he had a febrile disease and bloody diarrhea. Lab tests as described in the table:

Norm values	Measured value	
10-38	45	Urea
0.25-0.75	1.1	Creatinine
10.5-13.5	8.8	Hgb
150000-450000	85000	PLT

What is the most accurate definition of the anemia which the child has in his present disease?

- a. Microangiopathic Hemolytic Anemia
- **b.** Coombs positive Hemolytic Anemia
- c. Aplastic Anemia
- **d.** Iron Deficiency Anemia due to GI Bleeding

{username}

A 13-year-old girl complaining of intense pains in the left shin for the past 3 days. In anamnesis, about two weeks prior to her visit she injured her leg in a ballet lesson, and she continued dancing after the injury. Rules out systemic fever, notes sensation of paresthesia/tingling in the limb. Examination - significant tenderness over the left shin in mild touch, the limb is cold and pale.

No limitation in joint movement. Lab tests are normal, including inflammatory indices, limb X-ray is normal.

Which of the following treatments is the most recommended based on the most likely diagnosis?

- **a.** Antibiotics treatment
- **b.** Steroid treatment
- **c.** Casting the leg
- **d.** Physical therapy

{username}

Attached is the chest X-ray of a 5-year old boy. Pleurocentesis was performed as part of the investigation.



What finding from the fluid will support a diagnosis of an infectious process?

- **a.** pH 7.5
- **b.** Glucose 40 mg/dL
- c. 5000 LEUKOCYTES
- d. PROTEIN 1 gr/dL

{username}

A 9-month-old boy has had cough, soft stools and failure to thrive for about 3 months. A high level of chlorine was measured in a sweat test.

Which gene is highly likely to be related to the boy's disease?

- a. CFTR
- **b.** AIRE
- c. COL4A3
- d. MECP2