

Algorithm of Practice skills. Station №3
Diagnosis and treatment of common diseases in children (pediatrics, neonatology, children's infectious diseases)

Diagnosis	Algorithm of Practice skills
<p>Hypertension:</p> <ul style="list-style-type: none"> – Primary – Secondary (congenital heart disease, glomerulonephritis) <p>(Guideline for Screening and Management of High Blood Pressure in children and Adolescents. Pediatrics. 2017: 140 (3); e20171904)</p>	<p style="text-align: center;">Assessment of the child's arterial pressure by centile nomograms.</p> <ol style="list-style-type: none"> 1. Choose a nomogram to estimate the height of the child based on age and gender 2. Assess growth of the child with nomogram 3. Underline the result of evaluation of growth to age 4. Choose nomogram to assess the child's blood pressure based on age, gender 5. Assess the child's arterial pressure using nomograms 6. Underline the result of evaluation of systolic blood pressure, depending on growth 7. Underline the result of evaluation of diastolic blood pressure, depending on growth 8. Record an assessment of blood pressure 9. Make a diagnosis based on clinical data. <p style="text-align: center;">Follow-up</p>
<p>Protein-energy deficiency:</p> <ul style="list-style-type: none"> – Congenital heart disease – Celiac disease – Lactase insufficiency – Cystic fibrosis <p>1. Order of the Ministry of Health of Ukraine 15.07.2016 № 723 Unified clinical protocol of primary, secondary (specialized) and tertiary (highly specialized) medical care for cystic fibrosis</p> <p>2. Order of the Ministry of Health of Ukraine № 149 of 20.03.2008</p>	<p>Assessment of physical development of a child:</p> <ol style="list-style-type: none"> 1. To find a point on the nomogram of body weight estimation to age and emphasize the result. 2. Estimate the body weight to the age 3. To find a point on the nomogram of body length estimation to the age and emphasize the result. 4. Estimate the body length to age. 5. Calculate using the calculator the body mass index and record the result. 6. To emphasize the result of evaluation of the body mass index to the age. 7. Evaluate body mass index to age. 8. Assessment of physical development of the child on the basis of data obtained. <p>Make a diagnosis based on clinical data.</p>

<p>“On approval of the Clinical Protocol of medical care for a healthy child under 3 years of age”</p>	
<p>Diagnosis and treatment of obesity:</p> <ul style="list-style-type: none"> – Alimentary – Hypothalamic – Cushing syndrome <p>WHO Guideline. Assessing and managing children at primary health-care facilities to prevent overweight and obesity in the context of the double burden of malnutrition Updates for the Integrated Management of Childhood Illness (IMCI)3 October 2017. – 88</p>	<p>Assessment of physical development of a child:</p> <ol style="list-style-type: none"> 1. To find a point on the nomogram of body weight estimation to age and emphasize the result. 2. Estimate the body weight to the age 3. To find a point on the nomogram of body length estimation to the age and emphasize the result. 4. Estimate the body length to age. 5. Calculate using the calculator the body mass index and record the result. 6. To emphasize the result of evaluation of the body mass index to the age. 7. Evaluate body mass index to age. 8. Assessment of physical development of the child on the basis of data obtained. 9. Make a diagnosis based on clinical data.
<p>Growth retardation:</p> <ul style="list-style-type: none"> – pituitary dwarfism – Turner syndrome <p>Order of the Ministry of Health of Ukraine of 03.02.2009 No. 55 "About the statement of protocols of treatment of children with endocrine diseases"</p>	<p>Assessment of physical development of a child:</p> <ol style="list-style-type: none"> 1. To find a point on the nomogram of body weight estimation to age and emphasize the result. 2. Estimate the body weight to the age 3. To find a point on the nomogram of body length estimation to the age and emphasize the result. 4. Estimate the body length to age. 5. Calculate using the calculator the body mass index and record the result. 6. To emphasize the result of evaluation of the body mass index to the age. 7. Evaluate body mass index to age. 8. Assessment of physical development of the child on the basis of data obtained. 9. Make a diagnosis based on clinical data.
<p>Diagnosis and treatment of jaundice</p>	<p>Check for general danger signs:</p> <p>Ask, does jaundice present? When did the jaundice appear first? Check for jaundice.</p>

(Unified clinical protocol of primary health care Integrated management of childhood diseases (order of the Ministry of Health of Ukraine №438 12.05.2016)

Look and assess:

Look for jaundice (yellow eyes or skin).

If jaundice present, assess the localization by Kramer scale. Look at the young infant's palms and soles. Are they yellow?

Jaundice appearing after 24 hours of age, and palms and soles are not yellow.

Primary medical care assessment (IMCI):

The general danger signs are absent.

There are yellow face and eyes and other dermic area.

The Kramer's dermic area is 1, the total serum bilirubin is less than 100 $\mu\text{mol/l}$. The Kramer's dermic area is 2, the total serum bilirubin is less than 150 $\mu\text{mol/l}$.



Dermic area	1	2	3	4	5
Total serum bilirubin ($\mu\text{mol/l}$)	100	150	200	250	>250

Make a conclusion according to the algorithm "traffic light". For example: **Yellow: JAUNDICE**

Primary medical care activity (IMCI):

Advice the mother to give home care for the young infant.

Advice mother to return immediately if palms and soles appear yellow.

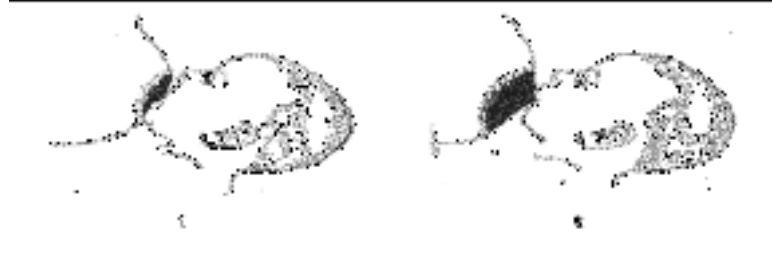
Follow-up in 1 day.

If palms and soles are not yellow, but jaundice has not decreased, advice the mother home care and ask her to return for follow-up in 1 day.

	<p>If jaundice has started decreasing, reassure the mother and ask her to continue home care. Ask her to return for follow-up at 2 weeks of age. If the young infant is older than 7 days, and Kramer's dermic area is 5, refer to a hospital. If the young infant is older than 14 days, and jaundice has not decreased, refer to a hospital for assessment.</p>
<p>Algorithm of Practice skills and treatment of diseases that are accompanied by cough or difficult breathing, pneumonia</p> <p>(Unified clinical protocol of primary health care Integrated management of childhood diseases (order of the Ministry of Health of Ukraine №438 12.05.2016))</p>	<p>Algorithm of actions of general practitioner</p> <p>CHECK FOR GENERAL DANGER SIGNS:</p> <ol style="list-style-type: none"> 1. Ask: is the child able to drink or breastfeed? 2. Does the child vomit everything? 3. Has the child had convulsions? 4. See if the child is lethargic or unconscious 5. Is the child convulsing now? <p>DANGER PNEUMONY OR VERY SERIOUS DISEASES</p> <p>General signs of danger and action:</p> <ol style="list-style-type: none"> 1. Refuse of food 2. Breast retraction in rest. 3. Fever 4. Lethargic 5. Convulsions 6. Rapid breathing 7. Asthmatic breathing 8. Stridor 9. Make a conclusion of the algorithm "traffic light". 4. Give the first dose of ampicillin 50mg/kg + gentamicin 7.5mg/kg intramuscularly 5. At the stridor, enter dexamethasone intramuscularly 6. Urgently send to the hospital
<p>Diagnosis and treatment of local bacterial infection, acute ear infection</p> <p>(Unified clinical protocol of primary health care Integrated management of childhood diseases (order of the Ministry of Health of Ukraine №438 12.05.2016))</p>	<p>Algorithm of actions of general practitioner</p> <p>Check for signs of danger and other symptoms:</p> <ul style="list-style-type: none"> • Earache. • Purulent discharge from the ear. • Painful swelling behind the ear. <ol style="list-style-type: none"> 1. Make a conclusion according to the algorithm "traffic light". 2. Prescribe Paracetamol Oral Suspension (120 mg / 5 ml) 15 mg/kg 4 times per day, for 10 days.

<p>of Health of Ukraine №438 12.05.2016)</p>	<ol style="list-style-type: none"> 3. Prescribe Amoxicillin Oral Suspension (125 mg / 5 ml) 40 mg/kg 2 times per day for 5 days. 4. Teach mother how to treat ear infection at home: Wash your hands. Make sponge from cotton. Enter sponge in the ear. Remove up sponge when it gets wet. Replace sponge until completely dry. Drip the ear drops 3 times per day. 5. Observe how mother treat the baby for the first time. 6. Prescribe to a consultation with an otolaryngologist. 7. Inform the mother about conditions that require immediate re-treatment and re-examination. 8. Re-examination In 2 days. 9. If there is any improvement, recommend the mother: Continue prescribed treatment for 10 days. 10. If the child's condition worsens and painful swelling appears behind the ear: To direct the baby to the hospital.
<p>Diagnosis and treatment of conditions associated with problems in the throat (Unified clinical protocol of primary health care Integrated management of childhood diseases (order of the Ministry of Health of Ukraine №438 12.05.2016)</p>	<p>Algorithm of actions of general practitioner</p> <ol style="list-style-type: none"> 1. Ask the mother: Can a child drink and eat? 2. Does the child have vomiting after each meal or drink? 3. Did the child have cramps during this disease? 4. Look: is the child lethargic, is he conscious? 5. Is the child having cramps at the moment? <p>Further:</p> <ol style="list-style-type: none"> 1. Ask if the child has a sore throat? 2. Ask if the child can drink, swallow? 3. Ask if the child has a cough, runny nose? 4. Ask if the child has an increase in body temperature of 37.5 C or higher? 5. See if there is a sore throat? 6. See if there is soreness of the anterior cervical lymph nodes? <p>General signs of danger and action:</p> <ol style="list-style-type: none"> 1. A plaque of the throat. 2. Fever. 3. Lack of cough and runny nose. 4. Make a conclusion according to the algorithm “traffic light”. For example: Yellow or Pink 5. A smear for diphtheria from the pharynx and nose.

	<ol style="list-style-type: none"> 6. If suspected of diphtheria - urgent hospitalization. 7. Give amoxicillin orally 40 mg/kg 2 times a day for 10 days. 8. Paracetamol 15 mg/kg orally. 9. Treat at home. 10. Inform mother of conditions requiring immediate medical attention. 11. Re-examination after 2 days. Re-evaluate if there are problems with the throat. Take your baby's body temperature. If improving, continue treatment with an antibacterial drug with a total duration of 10 days.
<p>Diagnosis and treatment of local bacterial infection of the baby's umbilical wound (Unified clinical protocol of primary health care Integrated management of childhood diseases (order of the Ministry of Health of Ukraine №438 12.05.2016))</p>	<p>Algorithm of actions of general practitioner Competencies to be checked</p> <p>Detection and assesment of general signs of danger.</p> <p>Conclusion by the algorithm of the traffic light.</p> <p>Determination of necessary actions</p> <p>Check for signs of danger and other symptoms:</p> <ol style="list-style-type: none"> 1. Redness of the umbilical wound. 2. Purulent discharge from umbilical wound. 3. Pustules on the skin 4. Make a conclusion according to the algorithm "traffic light". 5. Prescribe Amoxicillin Oral Suspension (125 mg / 5 ml) 2.5 ml 2 times per day for 5 days. 6. Teach mother how to treat a local infection at home: Wash your hands. Carefully wash the umbilical wound with boiled water. Dry the umbilical wound. Lay down Methylenum coeruleum solution in ethanol. Wash your hands. 7. Observe how mother treat the baby for the first time. 8. Inform the mother about conditions that require immediate re-treatment. 9. Re-examination in 2 days. 10. If there is any improvement, recommend the mother. Continue prescribed treatment for 5 days. 11. If the redness of the umbilical wound persists or purulent discharge appears, or the condition worsens: To direct the baby to the hospital.

<p>Consultation of mother on breastfeeding</p> <p>(Unified clinical protocol of primary health care Integrated management of childhood diseases (order of the Ministry of Health of Ukraine №438 12.05.2016))</p>	<p>Consultation of mother on breastfeeding</p> <ol style="list-style-type: none"> 1. Make a conclusion about breastfeeding 2. <i>Teach mother how properly hold the baby during breastfeeding</i> 3. Position of the baby during breastfeeding 4. Body and head of the baby should be placed: on the same line 5. When the baby stretches to the nipple, his nose must be: opposite the nipple 6. Mother holds: all body of the baby 7. Touch with nipple: lips of the baby 8. Wait until the baby broadly opens the mouth, quickly put the baby to the breast lower lip of the baby should be under the nipple 9. Choose the picture where the child correctly placed during breastfeeding <div data-bbox="593 884 1369 1160">  </div> <div data-bbox="593 1160 1369 1236"> <div>Picture 1</div> <div>Picture 2</div> </div> <ol style="list-style-type: none"> 10. Teach mother how care about the baby at home 11. Feed the baby exclusively with breast milk 12. Feed the baby so often and so long as baby want 13. Advise mother how to care about the baby at home 14. Re-examination in 2 days
<p>Children's infectious disease: Diagnosis and treatment of acute non-bacterial tonsillopharyngitis</p> <p>(Unified clinical protocol of primary health care Integrated management of childhood diseases)</p>	<p>Algorithm of doctor's actions</p> <ol style="list-style-type: none"> 1. Evaluate complaints and anamnesis data (features of epidemiological history, presence of contacts with a patient with streptococcal infection, features of disease onset, duration of disease) 2. Evaluate the results of the child's examination (state of consciousness, signs of danger - hyperthermia, convulsions, refusal to eat, shortness of breath, difficulty breathing with the accessory chest muscles; symptoms of intoxication, body temperature, runny nose,

<p>(order of the Ministry of Health of Ukraine №438 12.05.2016)</p>	<p>cough, pain in the anterior lymph nodes, condition of the skin, generalized rash on the skin, bright redness of the mucous membrane of the oral pharynx, the presence of plaque on the tonsils)</p> <ol style="list-style-type: none"> 3. Formulate a diagnosis. 4. Give one dose of Ibuprofen, a single dose of 10 mg / kg 5. Give Azithromycin at a dose of 10 mg / kg per day (per os) in the presence of plaque on the tonsils. 6. Rinse the child's throat with a solution of furacillin 7. Intravenously inject Ringer's lactate solution 20 ml / kg in severe intoxication 8. Inform the mother of conditions that require immediate re-treatment 9. In the absence of severe signs of the disease to carry out treatment at home. Bed rest during the acute period. 10. Take a swab from the throat and nose in the presence of plaque on the tonsils 11. Re-examination in 2 days.
<p>Children's infectious disease: Diagnosis and treatment of chickenpox without complications</p> <p>(According to the Order of the Ministry of Health of Ukraine № 354 from 09.07.2004 "Protocol of diagnosis and treatment of chickenpox")</p>	<p>Algorithm of doctor's actions</p> <ol style="list-style-type: none"> 1. Evaluate complaints and anamnesis data (features of the history, the presence of contacts with a patient with chickenpox, the peculiarities of the onset of the disease, the duration of the disease) 2. Evaluate the results of the child's examination (state of consciousness, signs of danger - hyperthermia, convulsions, refusal to eat, shortness of breath, difficulty breathing with the accessory muscles of the chest; symptoms of intoxication, body temperature, skin condition, generalized rash on the skin of the torso , face, limbs, scalp, itchy skin, mouth ulcers, purulent discharge from the eyes) 3. Formulate a diagnosis. 4. Give one dose of paracetamol (single dose of 15 mg / kg) 5. Inject Cefotaxime 50 mg / kg intramuscularly in case of complications 6. Give acyclovir at a dose of 10 mg / kg per day intravenously in severe chickenpox

	<p>7. Give a specific zoster-immunoglobulin - 0.2 ml / kg intramuscularly in severe chickenpox</p> <p>8. Lubricate the vesicles with a 1% solution of diamond green</p> <p>9. Rinse your mouth after each meal with a solution of furacillin</p> <p>10. Direct the child to the boxed ward of the hospital</p>
<p>Children's infectious disease: Diagnosis and treatment of measles with complications (Unified clinical protocol of primary health care Integrated management of childhood diseases (order of the Ministry of Health of Ukraine №438 12.05.2016))</p>	<p>Algorithm of doctor's actions</p> <ol style="list-style-type: none"> 1. Evaluate complaints and anamnesis data (features of the history, the presence of contact with a patient with measles, the peculiarities of the onset of the disease, the duration of the disease, the presence of vaccination in a child) 2. Evaluate the results of the child's examination (state of consciousness, signs of danger - hyperthermia, convulsions, refusal to eat, shortness of breath, difficulty breathing with the help of auxiliary muscles of the chest; symptoms of intoxication, body temperature, skin condition, generalized rash and one of the following signs: cough, runny nose or redness of the eyes, mouth ulcers, purulent discharge from the eyes, corneal opacity) 3. Formulate a diagnosis. 4. Give one dose of paracetamol (single dose of 15 mg / kg) 5. Inject Cefotaxime 50 mg / kg intramuscularly in the presence of pneumonia 6. Give vitamin A 200 thousand IU at a time 7. In case of purulent discharge from the eyes, remove the pus with gauze and boiled water. Instill 0.02% solution of decamethoxine 2 drops in both eyes 4-6 times a day 8. For mouth ulcers, treat the oral mucosa with a 1% aqueous solution of methylene blue 9. Inform the mother of conditions that require immediate re-treatment 10. Re-examination in 3 days
<p>Children's infectious disease: Diagnosis and treatment of diphtheria</p>	<p>Algorithm of doctor's actions</p> <ol style="list-style-type: none"> 1. Evaluate complaints and anamnesis data (features of epidemiological history, presence of contacts with a patient with diphtheria or sore throat, features of disease onset, diphtheria vaccination)

<p>(Order of the Ministry of Health of Ukraine №354 09.07.2004 Protocol for diagnosis and treatment of diphtheria in children)</p>	<ol style="list-style-type: none"> 2. Evaluate the results of the child's examination (state of consciousness, signs of danger - hyperthermia, convulsions, refusal to eat, shortness of breath, difficulty breathing with the accessory muscles of the chest; symptoms of intoxication, body temperature, cough, runny nose, skin condition, condition lymph nodes, the presence of plaque on the tonsils and their prevalence, redness of the mucous membrane of the oropharynx, swelling, tachycardia) 3. Formulate a diagnosis. 4. Inject intramuscular diphtheria antitoxin at a dose of 50,000 IU after a negative reaction during the test 5. Give one dose of Ibuprofen, a single dose of 10 mg / kg 6. Give ceftriaxone at a dose of 100 mg / kg per day intravenously 7. Intravenously administer prednisolone at a dose of 2 mg / kg in moderate form 8. Rinse the child's throat with a solution of furacillin 9. Intravenously inject a solution of 0.9% sodium chloride 20 ml / kg / day in severe intoxication 10. Intravenously inject 5% glucose solution at a dose of 10 ml / kg / day in severe intoxication 11. Direct the child to the boxed department of the infectious disease hospital urgently 12. Take a swab from the throat and nose in the presence of plaque on the tonsils
<p>Children's infectious disease: Diagnosis and treatment of secretory diarrhea (Unified clinical protocol of primary health care Integrated management of childhood diseases (order of the Ministry of Health of Ukraine №438 12.05.2016))</p>	<p>Algorithm of doctor's actions</p> <ol style="list-style-type: none"> 1. Evaluate complaints and anamnesis data (peculiarities of epidemiological history, presence of contacts with a patient with intestinal infection, peculiarities of disease onset, duration of disease) 2. Evaluate the results of the child's examination (state of consciousness, signs of danger - hyperthermia, convulsions, refusal to eat, shortness of breath, difficulty breathing with the accessory muscles of the chest, dehydration; symptoms of intoxication, body temperature, skin condition, tissue turgor, condition of the big toe, "inflamed" eyes, condition of mucous membranes, presence of signs of CNS damage, condition of lymph nodes, presence of symptoms of respiratory and cardiovascular system damage, condition of

	<p>gastrointestinal tract, urinary system, number and character of stools, presence of blood in the stool)</p> <ol style="list-style-type: none"> 3. Formulate a diagnosis. 4. Continue breastfeeding as needed 5. Give ORS 500 - 700 ml for 4 hours, then continue to give fluids in addition to the disappearance of symptoms (with moderate dehydration) 6. Intravenous administration of Ringer-Lactate solution 30 ml / kg for 1 hour and 70 ml / kg for the next 5 hours (in severe dehydration) 7. Give one dose of paracetamol (single dose of 15 mg / kg) 8. Inject Cefotaxime 50 mg / kg intramuscularly in the presence of complications (hemocolitis) 9. Refer the child to the boxed department of the hospital urgently in case of complications 10. Inform the mother of conditions that require immediate re-treatment. If there are no other severe manifestations, treat at home.
<p>Children's infectious disease Diagnosis and treatment of hemocolitis with dehydration (Unified clinical protocol of primary health care Integrated management of childhood diseases (order of the Ministry of Health of Ukraine №438 12.05.2016))</p>	<p>Algorithm of doctor's actions</p> <ol style="list-style-type: none"> 1. Evaluate complaints and anamnesis data (peculiarities of epidemiological history, presence of contacts with a patient with intestinal infection, peculiarities of disease onset, duration of disease) 2. Evaluate the results of the child's examination (state of consciousness, signs of danger - hyperthermia, convulsions, refusal to eat, shortness of breath, difficulty breathing with the accessory muscles of the chest, dehydration; symptoms of intoxication, body temperature, skin condition, tissue turgor, condition of the big toe, "inflamed" eyes, condition of mucous membranes, presence of signs of CNS damage, condition of lymph nodes, presence of symptoms of respiratory and cardiovascular system damage, condition of gastrointestinal tract, urinary system, number and nature of stools, presence of blood in the stool) 3. Formulate a diagnosis. 4. Continue breastfeeding as needed 5. Give ORS 450 - 700 ml for 4 hours, then continue to give fluid in addition to the disappearance of symptoms (with moderate dehydration)

	<p>6. Intravenous administration of Ringer-Lactate solution 30 ml / kg for 1 hour and 70 ml / kg for the next 5 hours (in severe dehydration)</p> <p>7. Give one dose of paracetamol (single dose of 15 mg / kg)</p> <p>8. Inject Cefotaxime 50 mg / kg intramuscularly in the presence of complications (hemocolitis)</p> <p>9. Direct the child to the boxed department of the hospital urgently</p>
<p>Children's infectious disease: Diagnosis and treatment of scarlet fever without complications</p> <p>(According to the Order of the Ministry of Health of Ukraine № 354 from 09.07.2004 "Protocol of diagnosis and treatment of scarlet fever")</p>	<p>Algorithm of doctor's actions</p> <ol style="list-style-type: none"> 1. Evaluate complaints and anamnesis data (features of the history, the presence of contacts with a patient with streptococcal infection, features of the onset of the disease, the duration of the disease) 2. Evaluate the results of the child's examination (state of consciousness, signs of danger - hyperthermia, convulsions, refusal to eat, shortness of breath, difficulty breathing with the accessory muscles of the chest; symptoms of intoxication, body temperature, skin condition, lymph node condition, generalized skin rash, sore throat, limited hyperemia of the soft palate (burning throat), white dermographism, tachycardia, increased blood pressure) 3. Formulate a diagnosis. 4. Give one dose of Ibuprofen, a single dose of 10 mg / kg 5. Give azithromycin at a dose of 10 mg / kg per day (per os) 6. Rinse the child's throat with a solution of furacillin 7. Assign Askorutin 1 tablet 2 times a day 8. Dates per os Loratadine 1 tablet 1 time per day 9. Intravenously inject Ringer's lactate solution 20 ml / kg in severe intoxication 10. Inform the mother of conditions that require immediate re-treatment 11. In the absence of severe signs of the disease to carry out treatment at home. Bed rest during the acute period. 12. Take a swab from the throat and nose in the presence of plaque on the tonsils 13. Re-examination in 2 days.
Children's infectious	Algorithm of doctor's actions

<p>disease: Algorithm for the diagnosis and treatment of rubella in children (according to the Unified Clinical Protocol of Primary Health Care Integrated Management of Childhood Illness (order of the Ministry of Health of Ukraine №354 від 09.07.2004))</p>	<ol style="list-style-type: none"> 1. Evaluate complaints and history (features of the history, the presence of contact with a patient with rubella, the peculiarities of the onset of the disease, the duration of the disease, the presence of vaccination in a child) 2. Evaluate the results of the child's examination (state of consciousness, signs of danger - hyperthermia, convulsions, refusal to eat, shortness of breath, difficulty breathing with the accessory muscles of the chest; symptoms of intoxication, body temperature, skin condition, lymph node condition, generalized skin rash, the presence of enanthema) 3. Formulate a diagnosis. 4. Give one dose of paracetamol (single dose of 15 mg / kg) 5. Inject Cefotaxime 50 mg / kg intramuscularly in case of complications 6. Soften the child's throat with a warm drink 7. Send the child's blood to determine Ig M to the pathogen by ELISA 8. Inform the mother of conditions that require immediate re-treatment 9. In the absence of severe signs of the disease to carry out treatment at home. Bed rest during the acute period. 10. Re-examination in 2 days.
<p>Algorithm of communication between a student and parents of a hybrid patient with pneumonia (Unified clinical protocol of primary health care Integrated management of childhood diseases (order of the Ministry of Health of Ukraine №438 12.05.2016))</p>	<p>Algorithm of communication between a student and parents of a hybrid patient with pneumonia</p> <ol style="list-style-type: none"> 1. Say hello and tell your name and surname. 2. Ask for the mother's name. 3. Ask mother about child for his(her) name and age (in years or months). 4. Ask: 5. Does the child drink, eat or breastfeed? 6. Does the child vomit after each meal or drink? 7. Did the child have convulsions during this illness? 8. Appreciate:

9. Is the child not lethargic, is he conscious? (Information will provide by the examiner).
10. Does the child have convulsions at the moment? (Information will provide by the examiner).
11. Does the child have a cough or difficulty breathing?
12. If so, ask: How long does the cough and shortness of breath last?
13. **Ask:**
14. Does the child have frequent loose stools?
15. Does the child have ear problems?
16. Does the child have a throat problem?
17. Does the child have a fever?
18. How many days does she have a fever?
19. **Appreciate:** does the child have a skin rash? (Information provided by the examiner)
20. I am calculating the respiratory rate per minute (Information will provide by the examiner).
21. I am determining if there is a chest retraction. (Information will provide by the examiner).
22. Assess the presence of stridor.
23. Assess the presence of asthma breathing, wheezing in the lungs.
24. Assess the presence of signs of danger in the child such as prolonged cough, chest retraction, wheezing, fever.
25. Classify diseases according to the system of integrated management of childhood diseases.
26. With asthma breathing and rapid breathing or chest retraction: Give a fast-acting aerosol bronchodilator through a spacer up to 3 times in 15-20 minutes. (Take the spacer and inhaler. Remove the cap from the inhaler and insert it into the spacer slot opposite the mask. Apply the spacer mask to the child's face with the narrow end to the nose and press the inhaler spray twice. Wait for the child to inhale the air mixture).
27. Give a first dose of «Amoxicillin» 50 mg / kg and «Gentamicin» 7.5 mg / kg intramuscularly (IM).
28. To prevent the development of hypoglycemia during transportation, offer to feed the baby.
29. Take the child to the hospital with an ambulance.
30. Wish recovery and say goodbye.

<p>Algorithm of communication of a student with a hybrid patient's parents with probable pneumonia (Unified clinical protocol of primary health care Integrated management of childhood diseases (order of the Ministry of Health of Ukraine №438 12.05.2016))</p>	<p>Algorithm of communication of a student with a hybrid patient's parents with probable pneumonia.</p> <ol style="list-style-type: none"> 1. Say hello and give your first and last name. 2. Ask the mother's name. 3. Ask the child's name and how old he or she is. 4. Ask: 5. Is the child able to drink or breastfeed? 6. Does the child vomit everything? 7. Has the child had convulsion? 8. Look: 9. if the child is lethargic or unconscious. (Information provided by the teacher) 10. Is the child convulsing now? (Information provided by the teacher) 11. Does the child have cough or difficult breathing? 12. If yes, ask: For how long? 13. Ask: 14. Does the child have diarrhea? 15. Does the child have an ear problem? 16. Does the child have a throat problem? 17. Does the child have fever? 18. To what degree did the temperature rise? 19. How many days does the temperature last? 20. Look: does the child have a skin rash? (Information provided by the teacher) 21. Count the breaths in one minute. (Information provided by the teacher) 22. Look for chest indrawing. (Information provided by the teacher) 23. Look and listen for stridor. 24. Look and listen for wheezing 25. Assess the presence of signs of danger in the child such as prolonged cough, chest retraction, wheezing, fever. 26. Classify diseases according to the system of Integrated Management of Childhood Illness. 27. If wheezing with either fast breathing or chest indrawing: Give a trial of rapid acting inhaled bronchodilator for up to three times 15-20 minutes apart. C (Take the spacer and inhaler. Remove the cap from the inhaler and insert it into the spacer slot
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	<p>opposite the mask. Place the spacer mask on the child's face with the narrow end to the nose and press the inhaler spray twice. Wait for the child to inhale the air mixture).</p> <p>28. Give oral Amoxicillin (suspension 125 mg/5ml) in a single dose of 40 mg / kg 2 times a day. for 5 days</p> <p>29. Soothe the throat and relieve the cough with a safe remedy</p> <p>30. 30. Inform the mother: "If the child's condition worsens or the child finds it difficult to breathe, seek help immediately or call an ambulance."</p> <p>31. Follow-up in 2 days</p> <p>32. Goodbye</p>
<p>Algorithm of student communication during conversation with parents of hybrid patient with bronchial asthma</p> <p>(Unified clinical protocol of primary health care Integrated management of childhood diseases (order of the Ministry of Health of Ukraine №438 12.05.2016))</p>	<p>Algorithm of student communication during conversation with parents of hybrid patient with bronchial asthma.</p> <p>1. Say hello and give your first and last name.</p> <p>2. Ask what is the mother's name.</p> <p>3. Ask the child's name and age (in years or months)</p> <p>4. Ask:</p> <p>5. Can a child drink or eat?</p> <p>6. Does the child vomit after each meal or drink?</p> <p>7. Did the child have seizures during this disease?</p> <p>8. Look:</p> <p>9. Is a child not lethargic, is he conscious?</p> <p>10. Does the child have seizures at the moment?</p> <p>11. Ask:</p> <p>12. Does the child have a cough or difficulty breathing?</p> <p>13. How long does the child have a cough?</p> <p>14. When did he have difficulty breathing?</p> <p>15. Does the child have frequent loose stools?</p> <p>16. Does the child have ear problems?</p> <p>17. Does the child have a throat problem?</p> <p>18. Does the child have a fever?</p> <p>19. If so, ask: How long?</p> <p>20. Look, listen:</p> <p>21. Count the respiratory rate per minute (Information is given by the teacher during the exam)</p> <p>22. See is there a chest retraction? (Information is given by the teacher during the exam)</p>

23. Look and listen to see if there is a stridor? (after auscultation say aloud if stridor is present)
24. Look and listen if there is asthma breathing (say aloud after auscultation if there is asthma breathing present)
25. Evaluate: the presence of danger signs such as cough, chest retraction, asthma breathing, prolonged exhalation (wheezing) and wheezing over the lungs
26. For asthmatic breathing, rapid breathing or chest retraction: Give a fast-acting aerosol bronchodilator up to 3 times in 15-20 minutes through a spacer. (Take the spacer and inhaler with the dispenser (100 mcg / press)) Remove the cap from the inhaler and insert it into the slot of the spacer opposite the mask. Place the spacer mask on the child's face with the narrow end towards the nose and press the inhaler can 2 times. Wait for the child to inhale the air-medical mixture). Repeat times every 15 minutes up to 3, and then assess the child's condition.
27. Count the respiratory rate and see again if there is chest retraction. (Information is provided by the teacher).
28. Listen again and evaluate the presence or absence of asthma breathing, then classify.
29. Make a preliminary conclusion on a possible diagnosis according to the system of integrated management of Childhood Illness.
30. Prescribe salbutamol for 5 days.
31. Prescribe oral amoxicillin (suspension 125 mg / 5 ml) in a single dose of 40 mg / kg 2 times a day for five days.
32. **Recommend** to alleviate the cough with a safe warm drink.
33. Specify if this is the first coughing fit or if the child already has had it before?
34. If this condition occurs, refer the child to a pulmonologist for a consultation.
35. **Advise the mother:** if the child's condition worsens and an attack of coughing and heavy breathing occurs again, then urgently seek help from you, or call an ambulance.
36. Appoint the next examination in 2 days.
37. Wish recovery and say goodbye!

Algorithm of student communication with parents of a hybrid patient with obstructive bronchitis

(Unified clinical protocol of primary health care Integrated management of childhood diseases (order of the Ministry of Health of Ukraine №438 12.05.2016))

Algorithm of student communication with parents of a hybrid patient with obstructive bronchitis

1. Say hello and call your name.
2. Ask the mother's name.
3. Ask the child's name and how old is he or she.
4. **Ask:**
5. Can a baby drink or breastfeed?
6. Does the child vomit after each meal or drink?
7. Did the child have seizures during this disease?
8. **Look:**
9. Is a child not lethargic, is he conscious?
(Information provided by the teacher)
10. Does the child have seizures at the moment?
(Information provided by the teacher)
11. **Ask:**
12. Does the child have a cough or difficulty breathing?
13. How long does a cough last?
14. When did you have difficulty breathing?
15. Does the child have frequent loose stools?
16. Does the child have ear problems?
17. Does the child have a throat problem?
18. Does the child have a fever?
19. If so, ask: How long, to what numbers did the temperature rise?
20. Look at whether a skin rash. (Information is given by the teacher during the exam)
21. Calculate the respiratory rate per minute
(Information is given by the teacher during the exam)
22. See if there is a chest retraction.
(Information is given by the teacher during the exam)
23. Look and listen to if there is a stridor (after auscultation say aloud if there is a stridor)
24. Look and listen for asthma breathing (after auscultation say aloud whether asthma breath)
25. Assess: signs of danger such as cough, chest tightness, asthma breathing, prolonged exhalation and wheezing over the lungs, fever.
26. For asthma breathing, rapid breathing or chest retraction: Give a fast-acting aerosol bronchodilator up to 3 times in 15--20 minutes through a spacer. Take a spacer and inhaler

	<p>with a dispenser (100 mcg / press). Remove the cap from the inhaler and insert it into the slot of the spacer opposite the mask. Apply the spacer mask on the child's face with the narrow end to the nose and press the inhaler twice. Wait until the child inhales the air-drug mixture. Repeat up to 3 times every 15 minutes, then assess the child's condition.</p> <p>27. Calculate the respiration rate and see again if there is chest retraction. (Information is provided by the teacher).</p> <p>28. Listen again and evaluate the presence or absence of asthma breathing, then classify.</p> <p>29. Make a preliminary conclusion about the possible diagnosis of the system of integrated management of childhood diseases.</p> <p>30. Enter the first dose of amoxicillin 50 mg / kg and gentamicin 7.5 mg / kg intramuscularly.</p> <p>31. Advise the mother to breastfeed a baby or give formula until the ambulance arrives.</p> <p>32. Ask the mother if she has warm clothes for the baby to keep the baby warm on the way.</p> <p>33. Say loudly: The ambulance is called; I direct you with the child to a hospital.</p> <p>34. Wish recovery and say goodbye.</p>
<p>Algorithm of communication of the student with parents of the hybrid patient sick of a foreign body of respiratory tracts</p> <p>(Unified clinical protocol of primary health care Integrated management of childhood diseases (order of the Ministry of Health of Ukraine №438 12.05.2016))</p>	<p>Algorithm of communication of the student with parents of the hybrid patient sick of a foreign body of respiratory tracts</p> <p>1. Say hello and give your first and last name.</p> <p>2. Ask the mother's name.</p> <p>3. Ask the child's name and age.</p> <p>4. Ask:</p> <p>5. Can the baby drink, eat or breastfeed?</p> <p>6. Does the child vomit after each meal or drink?</p> <p>7. Did the child have seizures during this disease?</p> <p>8. Look:</p> <p>9. Isn't the child lethargic or conscious? (Information provided by the teacher)</p> <p>10. Does the child have seizures at the moment? (Information provided by the teacher)</p> <p>11. Ask:</p> <p>12. Does the child have a cough or difficulty breathing?</p>

13. How long does a cough last?
14. After which there was a cough?
15. When did you have difficulty breathing?
16. Does the child have frequent loose stools?
17. Does the child have ear problems?
18. Does the child have a throat problem?
19. Does the child have a fever?
20. If so, ask: How long, to what numbers did the temperature rise?
21. Calculate the respiratory rate per minute (Information is given by the teacher during the exam)
22. **See** if there is a chest retraction. (Information is given by the teacher during the exam)
23. Look and listen to see if there is stridor (after auscultation say aloud if there is stridor, difficulty breathing)
24. Look and listen for asthma breathing (say aloud after auscultation if you have asthma breathing)
25. **Assess:** the presence of signs of danger such as prolonged cough, chest retraction, stridor on inhalation.
26. **For asthmatic breathing, rapid breathing or chest retraction:** Give a fast-acting aerosol bronchodilator up to 3 times in 15-20 minutes through a spacer. (Take the spacer and inhaler with the dispenser (100 mcg per dose). Remove the cap from the inhaler and insert it into the slot of the spacer opposite the mask. Apply the spacer mask on the child's face with the narrow end to the nose and press the inhaler can twice. Wait until the child inhales the air-medicine mixture). Repeat up to 3 times every 15 minutes, then assess the child's condition.
27. Calculate the respiration rate and see again if there is chest retraction. (Information is provided by the teacher).

	<p>28. Listen again and evaluate the presence or absence of asthma breathing or stridor, then classify.</p> <p>29. Make a preliminary conclusion about the possible diagnosis according to Integrated Management of childhood diseases.</p> <p>30. Administer the first dose of amoxicillin 50 mg / kg and gentamicin 7.5 mg / kg intramuscularly.</p> <p>31. Encourage the mother to feed the baby before the ambulance arrives.</p> <p>32. Ask the mother if she has warm clothes for the baby to keep the baby warm on the way.</p> <p>33. Say out loud: The ambulance is called; I direct you with the child to a hospital.</p> <p>34. Wish recovery and say goodbye.</p>
<p>Algorithm of communication of a student with parents of a hybrid patient with acute stenotic laryngotracheitis (Unified clinical protocol of primary health care Integrated management of childhood diseases (order of the Ministry of Health of Ukraine №438 12.05.2016))</p>	<p>Algorithm of communication of a student with parents of a hybrid patient with acute stenotic laryngotracheitis (child of the first year of life)</p> <ol style="list-style-type: none"> 1. Say hello and give your first and last name. 2. Ask the mother's name. 3. Ask the child's name and age or months. 4. Ask: 5. Can a baby drink or breastfeed? 6. Does the child vomit after each meal or drink? 7. Did the child have seizures during this disease? 8. Look: 9. Is a child not lethargic, is he conscious? (Information is given by the teacher) 10. Does the child have seizures at the moment? (Information is given by the teacher) 11. Ask: 12. Does the child have a cough or difficulty breathing? 13. If yes, ask: How long, how many days lasting cough? When did shortness of breath occur? 14. Ask: 15. Does the child have frequent loose stools? 16. Does the child have ear problems?

	<p>17.Does the child have a throat problem?</p> <p>18.Does the child have a fever?</p> <p>19.If so, ask: How long, to what numbers did the temperature rise? What is the temperature now? (Information is given by the teacher during the exam)</p> <p>20.Look whether there is a rash on the skin. (Information is given by the teacher during the exam)</p> <p>21.Calculate the frequency of breaths per minute (Information is given by the teacher during the exam)</p> <p>22.See if there is a chest retraction (Information is given by the teacher during the exam)</p> <p>23. Look and listen to see if there is a stridor (after auscultation say aloud if there is a stridor)</p> <p>24. Look and listen for asthma breathing (say aloud after auscultation if you have asthma breathing)</p> <p>25.Evaluate: the presence of signs of danger such as cough, chest retraction, stridor, prolonged breathing, rapid breathing, fever.</p> <p>26.With asthma breathing, rapid breathing or chest retraction: Give a fast-acting aerosol bronchodilator up to 3 times in 15–20 minutes through the spacer. (Take the spacer and inhaler. Remove the cap from the inhaler and insert it into the spacer slot opposite the mask. Wait until the baby breathe airborne drug mixture).</p> <p>27.In case of body temperature above 38.5 give one dose of antipyretic drug (paracetamol 15 mg / kg or ibuprofen 10 mg / kg)</p> <p>28.Calculate the respiratory rate and look again to see if there is stridor, if there is prolonged breathing, if there is chest retraction. (Information is provided by the teacher). Then classify.</p> <p>29.Make a preliminary conclusion about a possible diagnosis according to the system</p>
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	<p>of integrated management of childhood diseases.</p> <p>30. Inject the first dose of amoxicillin 50 mg / kg and gentamicin 7.5 mg / kg intramuscularly.</p> <p>31. Recommend to the mother feed the baby breast milk or formula before the ambulance arrives.</p> <p>32. Say aloud: The ambulance is called; I direct you with the child to a hospital.</p> <p>33. Wish recovery and say goodbye.</p>
<p>Algorithm of communication of a student with parents of a hybrid patient with acute stenotic laryngotracheitis (Unified clinical protocol of primary health care Integrated management of childhood diseases (order of the Ministry of Health of Ukraine №438 12.05.2016))</p>	<p>Algorithm of communication of a student with parents of a hybrid patient with acute stenotic laryngotracheitis (child older than 1 year of age)</p> <ol style="list-style-type: none"> 1. Say hello and give your first and last name. 2. Ask the mother's name. 3. Ask the child's name and age or months. 4. Ask: 5. Can a baby drink or feed? 6. Does the child vomit after each meal or drink? 7. Did the child have seizures during this disease? 8. Look: 9. Is a child not lethargic, is he conscious? (Information is given by the teacher) 10. Does the child have seizures at the moment? (Information is given by the teacher) 11. Ask: 12. Does the child have a cough or difficulty breathing? 13. If so, ask: How long, how many days does the cough last? When did shortness of breath occur? 14. Ask: 15. Does the child have frequent loose stools? 16. Does the child have an ear problem? 17. Does the child have a throat problem? 18. Does the child have a fever? 19. If yes, ask: How long, to what numbers did the temperature rise? What is the temperature now? (Information is given by the teacher during the exam) 20. Look whether there is a rash on the skin. (Information is given by the teacher during the exam)

21. **Calculate the frequency of breaths per minute (Information is given by the teacher during the exam)**
22. **See if there is a chest retraction (Information is given by the teacher during the exam)**
23. **Look and listen to see if there is a stridor (after auscultation say aloud if there is a stridor)**
24. **Look and listen for asthma breathing (say aloud after auscultation if there is asthma breathing)**
25. Evaluate: **signs of danger such as cough, chest tightness, stridor, difficulty and prolonged breathing, shortness of breath, fever.**
26. With asthma breathing, rapid breathing or chest retraction: Give a fast-acting aerosol bronchodilator up to 3 times in 15–20 minutes through the spacer. (Take the spacer and inhaler. Remove the cap from the inhaler and insert it into the spacer slot opposite the mask. Apply the spacer mask on the child's face with the narrow end to the nose and press the inhaler can twice. Wait until the child inhales the air-drug mixture).
27. In case of the body temperature above 38.5 give one dose of antipyretic drug (paracetamol 15 mg / kg or ibuprofen 10 mg / kg)
28. Calculate the respiratory rate and look again to see if there is stridor, if there is prolonged breathing, if there is chest retraction. (Information is provided by the teacher). Then classify.
29. **Make a preliminary conclusion about a possible diagnosis** according to the system of integrated management of childhood diseases.
30. Inject the first dose of amoxicillin 50 mg / kg and gentamicin 7.5 mg / kg intramuscularly.
31. Inject dexamethasone 0.6 mg / kg intramuscularly with stridor.
32. **Recommend to the mother** alleviate the cough with a warm drink.
33. **Encourage the mother** to feed the baby before the ambulance arrives.

	<p>34. Say aloud: The ambulance is called, I direct you with the child to a hospital.</p> <p>35. Wish recovery and say goodbye.</p>
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