

Ministry of health of Ukraine
National Pirogov Memorial Medical University

Instructions for station number 4

Clinical emergency care task with standard patient

Tasks:

1. Be able to establish the most possible emergency case based upon received data.
2. Provide differential diagnose.
3. Be able to evaluate results of the additional laboratory and instrumental investigations.
4. Determine strategy of emergency medical support upon standard schemes.

Equipment of the station:

1. Clinical situation scenario.
2. Pediatric phantom.
3. Results of additional laboratory and instrumental investigations.
4. Paper A4.
5. Pen.

List of situations: various of childhood pathology (hypoglycemic coma; supraventricular paroxysmal tachycardia with narrow QRS complexes; dyspnea attack in patients with tetralogy of Fallot; anaphylaxis, bradycardia, cardiac arrest, hypovolemic shock).

CLINICAL CASE 1.

Girl of 9 years old who is suffering from DM, accidentally injected higher dose of the insulin and was admitted to the emergency room with confused consciousness. During the objective examination: unconscious, without reaction on pain. Single breathing efforts, gasping, SpO₂ - 90%. Pulse cant be count on the central and peripheral arteries, but detectable. BP - 75/45 mmHg, capillary refill time – 4 sec. Pupils don't react on light. Body temperature 36°C, skin is pale and clear, with acrocyanosis.

1. Evaluate general condition of the patient.
2. Prescribe laboratory and instrumental investigations.
3. Stabilize the patient

CLINICAL CASE 2.

Patient of 12 years old is getting chemotherapy due to ALL, with a lot of side effects. Suddenly condition worsened, patient became unconscious. The airway is maintainable, breathing rate - 2/min, superficial, SpO₂ - 88%. Pulse is not detectable, BP - 80/55 mmHg, capillary refill time 4 sec. Pupils don't react on light. Body temperature 36 °C, skin is clear, pale, acrocyanosis.

1. Evaluate general condition of the patient.
2. Prescribe laboratory and instrumental investigations.
3. Stabilize the patient

CLINICAL CASE 3.

Boy of 11 years old was admitted to the emergency room with sudden onset of fatigue during PT lesson. Boy complains on palpitations, dizziness, pain at the region of the heart, malaise. The child is conscious, responding questions. The airway is maintainable, breathing rate is 42/min, SpO₂ - 93%. Pulse is on the central and peripheral arteries rhythmical, 200 – 220/min, BP 100/55 mmHg, capillary refill time - 2 sec. Pupils normal react on light, reaction of the child is adequate. Body temperature 36,4 °C, skin is clear, pale.

1. Evaluate general condition of the patient.
2. Prescribe laboratory and instrumental investigations.
3. Stabilize the patient

CLINICAL CASE 4.

Girl of 8 years old, is getting treatment at the cardiological department due to nonrheumatic carditis. At the 5 day of the treatment it was a sudden onset of the tachycardia episode. Child is complaining on palpitation, discomfort at the region of the heart, difficulties with breathing. Girl is conscious , the airway is maintainable, breathing rate is 40/min, SpO₂ - 92%. Pulse is detectable on the central and peripheral arteries, 200-210/min, BP 95/55 mmHg, capillary refill time 2 sec. Pupils reaction on light is saved, child is adequately reacts on examination. Body temperature 36,3 °C, skin is pale, clear.

1. Evaluate general condition of the patient.
2. Prescribe laboratory and instrumental investigations.
3. Stabilize the patient

CLINICAL CASE 5

Child of 4 years old after the injection of antibiotic at the department of the hospital developed sudden collapse. The child is lethargy, has swelling of the face, distant wheezing. The airway is maintainable, breathing rate is 44/min, SpO₂ - 92%. Pulse is rhythmical on the central and peripheral arteries, 100 – 110/min, capillary refill time 1 sec, BP 65/35 mmHg. Pupils reaction on light is saved. Body temperature 36,0 °C, skin is pale, clear.

1. Evaluate general condition of the patient.
2. Prescribe laboratory and instrumental investigations.
3. Stabilize the patient

CLINICAL CASE 6

Child of 1 year old had been suffering from the profuse diarrhea for the passed 3 days, was admitted to the emergency room in severe condition. The child is sleepy and doesn't react on examination, urination is absent for the last 6 hours, frequent watery diarrhea – up to 20 times a day, vomiting. The airway is maintainable, breathing rate is 38/min, superficial, SpO₂ - 94%. Pulse is rhythmical detectable on central and peripheral arteries 110 – 120/min, capillary refill time 3 sec, BP 70/35 mmHg. Pupils reaction is saved, the child reacts just on loud voice. Body temperature is 36,0 °C, skin is dry, pale and clear.

1. Evaluate general condition of the patient.
2. Prescribe laboratory and instrumental investigations.
3. Stabilize the patient

CLINICAL CASE 7

Girl of 13 years old was admitted to the hospital by an ambulance after spraying at school of unknown substance. The child is answering questions with late reaction, complains on difficulties of breathing. The airway is maintainable, breathing movements with rate 9/min, superficial, SpO₂ - 91%. Pulse on the central and peripheral arteries is rhythmical, 44 – 50/min, capillary refill time 2 sec, BP 85/55 mmHg. Pupils reaction on light is normal, child is lethargy. Body temperature 36,8 °C, skin is pale, clear.

1. Evaluate general condition of the patient.
2. Prescribe laboratory and instrumental investigations.
3. Stabilize the patient

CLINICAL CASE 8

Child of 8 years old was admitted to the emergency room due to sudden appearance of the skin rash and difficulties of breathing that developed after the child had eaten peanut butter. Child reacts on examination adequately, confused, complains on feeling of breathing difficulties. The airway is maintainable, breathing rate 40/min, wheezing, SpO₂ - 93%. Pulse is detectable on the central and peripheral arteries, 110 - 120/min, capillary refill time 1 sec, BP 70/50 mmHg. Pupils reaction on light is normal. Body temperature 36,5 °C, single urticaria are observed on the trunk, paleness of the skin.

1. Evaluate general condition of the patient.
2. Prescribe laboratory and instrumental investigations.
3. Stabilize the patient

CLINICAL CASE 9

To the emergency room was admitted 13 years old boy, who suddenly developed palpitations during athletics training. The patient is conscious, lethargy, complains on a chest pain, dizziness, air insufficiency while breathing. The airway is maintainable; breathing rate is 46/min, superficial, SpO₂ - 91%. Pulse is detectable on the central and peripheral arteries, rhythmical, 190 - 210/min, capillary refill time 3 sec, BP 80/50 mmHg. Pupil's reaction is normal. Body temperature 36,9 °C, skin is clear and pale.

1. Evaluate general condition of the patient.
2. Prescribe laboratory and instrumental investigations.
3. Stabilize the patient

CLINICAL CASE 10

To the emergency room was admitted 5 years old girl in confused mental status. From the mothers explanation – she left child home alone approximately for an hour, once returned back home found her sleepy, girl didn't react on toys, conversation. During the examination airway is maintainable, breathing rate 16/min, superficial, SpO₂ - 91%. Pulse is detectable on the central and peripheral arteries, 48 – 54/min, capillary refill time 3 sec, BP 75/40 mmHg. Pupil's reaction is saved, during examination child reacts just on pain. Body temperature 36,9 °C, skin is clear and pale.

1. Evaluate general condition of the patient.
2. Prescribe laboratory and instrumental investigations.
3. Stabilize the patient