Erythromelalgia (Mitchell's syndrome) is a rare disease characterized by attacks of pain, redness and warmth in limited skin areas of the distal departments of extremities. Low incidence of erythromelalgia in the population, especially among children, causes particular difficulties with timely diagnosis in pediatric and family doctor practice.

Mitchell’s Syndrome (erythromelalgia) is angiotrophoneurosis, which is based on paroxysmal dilation of arterioles of extremities distal departments. Dilatation leads to episodes of intense burning pain, redness and local increase of skin temperature, swelling and often accompanied by increased sweating. Sometimes this disease is referred as a reverse Raynaud's syndrome.

According to statistics, the incidence of erythromelalgia is estimated as 1.3 : 100,000, with women more frequently to be registered, with a frequency of 2: 100000, and for men to be registered less often, with a frequency 0.6: 100,000. Erythromelalgia is a rare disease among children. However, there is early-onset form. Its clinical manifestations were observed in patients from 7 to 10 years old. Such form of the disease can occur in practice of pediatrician or family doctor.

We observed the manifestation of the early-onset erythromelalgia of an eleven-year-old girl. Patient M. was admitted to the CMU DTMO Kramatorsk with complaints of burning pain attacks in the hands and feet, accompanied by hyperemia and edema.

From the anamnesis of life is well known that the patient was born from normal pregnancy, childbirth was in term and birth weight was 2800 g, child shouted immediately. The girl grew up and developed according to age. Allergic anamnesis is not burdened.

At the moment of objective examination during the attack the patient’s general condition is serious. Psycho-emotional excitement remains. Body temperature is 36,7 ° C. Patient body weight is about 25 kg. The skin is clean, however, on the hands and feet there is hyperemia and skin edema. At palpation erythematous areas are harshly painful but cold to the touch, due to the received frostbite. There is a vesicular respiration in the lungs. Breathing rate is 23 per minute. Blood pressure is 100/60 mm Hg. During auscultation the heart rhythm is irregular. Heart rate is 94 per minute. Abdomen is soft and painless. The liver speaks at 3 cm from under the rib arch. Physiological functions are normal. Neurological status has no focal symptoms. There are no meningeal signs.
Taking into account the particular clinical picture of the disease, the patient’s preliminary diagnosis was Mitchell’s syndrome (erythromelalgia). The absence of pathological changes in the hemogram allowed to exclude secondary erythromelalgia.

The patient was performed a complex anti-inflammatory therapy with NSAIDs and corticosteroids, decongestants, analgesics, sedatives and nootropics, antihypoxic agents, antioxidants and drugs for improved microcirculation.

On the background of therapy the patient's condition improved, pain decreased significantly, edema and local hyperemia decreased too, psycho-emotional status normalized. The child was sent for further examination and treatment in the clinic OKHMATDIT Kiev.

This case shows that, despite the low incidence of Mitchell's syndrome (erythromelalgia) among the population, especially among children, a detailed medical history and a thorough physical examination at the time of the attack with the characteristic clinical picture allow pediatrician or family doctor to diagnose erythromelalgia and additional methods of research allow to verify its form and assign adequate therapy to improve the patient's quality of life and prevent further progression of the disease.