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#### COMMON DISEASES WITH UNCOMMON PRESENTATIONS

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თინათინ კუტუბიძე, ეკა უბერი, ეკა ნახუცრიშვილი, ირინე კეკელიძე, მანანა კობახიძე ხშირი დაავადებების იშვიათი გამოვლინებები თსსუ, გ.ჟვანიას სახ. პედიატრიის აკადემიური კლინიკა

# რეზიუმე

ჩვენთვის ცნობილ ბევრ გავრცელებულ დაავადებას თავდაპირველად შეიძლება ჰქონდეს მისთვის უჩვეულო, არასპეციფიური კლინიკური გამოვლინება, რაც ართულებს დიაგნოსტიკას. ჩვენ წარმოვადგინეთ შემთხვევები ჩვენი პრაქტიკიდან, სადაც ადგილი ჰქონდა ე.წ "Overlap" კლინიკურ გამოვლინებას. კერძოდ, 10 წლის ვაჟი რეკურენტული ცხელებით და ჰემორაგიული გამონაყარით, ანამნეზში არსებული ეპილეფსიით და 5 წლის ვაჟი პლევროპნევმონიით და თრომბოციტოპენიით.

Many common diseases can initially have unusual presentations. This is especially challenging in pediatric decision making. "By understanding what happens in individual cases, one is able to generalize to similar situations and incorporate basic principles into practice. We are taught the classic signs and symptoms of innumerable diseases and disorders in the course of our medical training to develop skills in pattern recognition. From repetitive review of these patterns, we learn the elements of these common conditions. The astute physician detects variance from the typical pattern to make the more unusual or exceptional diagnosis [1]. Herein we are demonstrating several cases from our clinical practice, with overlapping presentations.

Case 1: A 10-Year-Old Boy with Fever and Hemorrhagic Rash. A 10-year-old male, with a past medical history significant for epilepsy, presented to the emergency department with a hectic temperature that did not respond well to the antipyretic drug, general weakness, episodes of loss of consciousness and hemorrhagic rash. Symptoms of fever, dizziness, arthralgia, began approximately 7 days prior to admission. The mother reported difficulty in arousing the patient on the day of admission. Review of symptoms was negative for trauma, injury, and recent ingestions or medications. Physical examination revealed an illappearing but alert boy with vitals: T 37.3°C; RR 30/min; HR 153 bpm; BP 113/53 mmHg; Height 50th percentile; Weight 50th percentile. Pupils were equal and reactive to light. Cardiac examination revealed tachycardia but no murmurs, rubs, or gallops. Lung examination was clear. His abdomen was soft and nontender without hepatosplenomegaly. No prominent adenopathy. His skin examination was remarkable for paleness of the skin and visible mucous membrane, soreness, cold extremities, multiple bruises in the neck, back and extremities, limited movement and pain. No tenderness or deformity was noted with palpation of his extremities. The rest of his examination was normal. Laboratory analysis revealed 17 800 WBCs/mm3 with 24% segmented neutrophils, 66% lymphocytes, and 10% monocytes. The hemoglobin was 7.2 g/dL and there were 44 000 platelets/mm3. Prothrombin and partial thromboplastin times were normal. Electrolytes, creatinine and liver function studies were normal.

The condition was assessed as thrombocytopenic purpura, the patient was given antibacterial and hormone therapy, rehydration therapy with crystalloids. During hospital stay anemia and thrombocytopenia have deepened, transfusion of erythrocyte mass was performed, and the clinical picture improved: pain was relieved, no new hemorrhagic element was detected. A tendency towards anemia and thrombocytopenia remained noteworthy with repeated analysis controls. Therefore, a bone marrow puncture (sternal) was considered necessary, where blast cells were detected, and the diagnosis of lymphoblastic leukemia was confirmed.

Acute Leukemia is one of the common hematological malignancies encountered with varied clinical and hematological presentation. In acute leukemia, complications like bleeding and infection

cause significant morbidity and mortality, thus overshadowing the thromboembolic events. The varied presentation in ALL can at times be quite misleading [2]. The important role of the pediatrician is in the early diagnosis of ALL. Request a CBC in all cases of children with anemic syndrome, purpuric syndrome and splenomegaly. CBC should also be considered in children with bone pain that does not appear to be growth-related and in children with a fever that is long-standing and unresponsive to conventional treatments [3].

Case 2: A 5-Year-Old Boy with Recurrent Pleuropneumonia and Thrombocytopenia. A 5-yearold boy, with a past medical history significant for autism and mental retardation presented to the emergency room with a 3-days history of fever and shortness of breath. His parents stated that since discharge from a previous hospitalization 10 days ago due to pneumonia, the boy has had episodes of productive coughing. On the day prior to admission, his respiratory symptoms worsened and on the day of admission, he had severe sternal retractions and decreased oral intake and activity. On examination, he was alert with moderate respiratory distress and frequent episodes of coughing. vitals: T 37.6°C; P 118 bpm; RR 58/min; Oxygen saturation 88% in room, Weight 25th percentile. His chest examination was significant for grunting with intercostal retractions. Rales were appreciated on the right with decreased aeration throughout. No wheezes were heard. His skin examination was remarkable for multiple hemorrhagic eruptions of 0.2-0.5 cm size in different parts of the body. The remainder of his physical examination was within normal limits. Laboratory analysis revealed a peripheral blood count with 26 900 white blood cells/mm3 with 78% segmented neutrophils, 16% lymphocytes, 5% monocytes. His hemoglobin was 10.7 g/dL and there were 52 000 platelets/mm3. A urinalysis was normal and a chest roentgenogram revealed bilateral infiltrates and pleural effusion. The condition was assessed as polysegmental pleuropneumonia. The patient was given broad-spectrum combined antibacterial therapy, oxygen therapy, glucocorticoid therapy. Pleural effusion was drained and a bloody exudate in the amount of 800 ml was obtained, with cytological examination of the fluid. The presence of pyothorax was confirmed. A CT scan of the chest was performed, bilateral consolidations were observed with the exudate in the left pleural cavity. It should be noted that the presence of tuberculosis was ruled out by the examination of the pleural fluid during the previous hospitalization. Due to prolonged thrombocytopenia and anemia, sternal puncture revealed - no pathological changes. Hemotransfusion was performed due to severe anemia. On the background of treatment, the condition improved, shortness of breath decreased, saturation was maintained, although the pleural effusion still remained noteworthy, a repeat examination for tuberculosis infection was planned – for ruling out tuberculosis.

Platelets are inflammatory cells with an important role in antimicrobial host defenses. We speculate that an abnormal platelet count may be a marker of severity in patients with community-acquired pneumonia (CAP) [4]. ITP is an autoimmune disorder characterized by immunologic destruction of otherwise normal platelets most commonly occurring in response to an unknown. In its secondary form, ITP can be triggered by many infectious and non-infectious conditions. Secondary ITP associated with tuberculosis (TB) has rarely been described in the literature [5]. The actual pathophysiology, clinical significance and optimal treatment is not fully known, but it should be recognized, especially in areas of high endemicity, that TB-related ITP is treatable [6].

**Conclusion**. Many pediatric common diseases can be mimicked by unusual clinical manifestations that can be very difficult to differentiate. Every patient is unique. Patients don't present with a disease, they present with symptoms. There are a lot of deviations from the classical patterns and we need more advanced diagnostic skills.

### References:

- 1. Samir S. Shah, Stephen Ludwig, Symptom-Based Diagnosis in Pediatrics, 2014 by McGraw-Hill Education;
- 2. Manjari Kishore, Vijay Kumar, Sadhna Marwah, and Abhay S Nigam Unusual Presentation of Acute Leukemia: A Tripod of Cases;
- 3. O.González Llano, The complete blood count in the early diagnosis of acute leukemia in children, Medicina Universitaria. 2017;18(73):216-21;

- 4. Mehdi Mirsaeidi et al. Thrombocytopenia and Thrombocytosis at Time of Hospitalization Predict Mortality in Patients with Community-Acquired Pneumonia, Chest Journal. 2010 Feb;137(2):416-20;
- 5. S. F. Weber et al Immune thrombocytopenia secondary to tuberculosis: a case and review of literature, The International Journal of Tuberculosis and Lung Disease, Volume 21, Number 4, 1 April 2017, pp. 466-470(5);
- 6. Rev Bras Hematol Hemoter. 2016 Apr-Jun; 38(2): 163–165. doi: 10.1016/j.bjhh.2016.02.002;

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#### **SUMMARY**

Many common diseases known to us may initially have unusual, non-specific clinical manifestations, making diagnosis difficult. We presented cases from our practice where the so-called "Overlap" clinical manifestation occurred. Specifically, a 10-year-old boy with recurrent fever and hemorrhagic rash, with history of epilepsy, and a 5-year-old boy with pleuropneumonia and thrombocytopenia.

Keywords: Common diseases, Unusual manifestations, Children

