POLYARTERITIS NODOSA IN ADOLESCENT: CASE REPORT

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BACKGROUND

Polyarteritis nodosa (PAN) was first described by Kussmaul and Maier in 1866. The original and subsequent description identified the pathological features of necrotizing arteritis with nodules along the walls of medium and small muscular arteries, affecting multiple organ systems throughout the body. Systems symptoms with hypertension, peripheral neuropathy, cardiac, renal involvement, abdominal pain, involvement of the locomotor system, make the clinical picture, the course and progression of disease extremely variable.

CASE REPORT

A male teenager, 14 years old, started 1 month ago with daily fever, especially at night, associated with migratory arthritis in his right knee and proximal interphalangeal joints who presented erythematous and purplish lesions (Figure 1). He had severe malnutrition evolved with significant malaise, fatigue, myalgia and complaints of cold, feeling hot in the body. Subcutaneous nodules in lower limbs covered by erythematous skin. Considerable atrophy of lower limb musculature (Figure 2). Edema and erythematous and violaceous lesions in the hands and feet (Figure 3). Ceftriaxone started considering bacteremia, by referring toothache and multiple cavities. Improvement of malaise after antibiotic introduction. ASLO 1600, PCR 48, VHS 118/128, ANA 1:80, Hb 9.6, leuco, 14,709, 396,000 platelets, ferritin 1,227. Initial hypothesis of rheumatic fever. Introduced ASA 80 mg/kg/day and benzathine benzylpenicillin. Serologies for normal TORCHS, dengue, Zika, Chikungunya, but IGM for herpes positive, despite absence of symptoms, prescribed acyclovir. Echocardiogram normal. US with mild splenomegaly, impaired renal echogenicity, proteinuria 10 mg/kg. Improvement of fever after ASA but keeping arthritis. Despite the improvement in the general condition, presented with a purplish lesion on the 1st polydactyl of the left foot (Figure 4). Due to the possibility of necrosis, possibility of necrosis considering diagnosis of PAN, prednisone 60 mg/day was started. Improvement of general condition, of myalgia and arthritis, nodules regressing but with many skin lesions similar to vasculitis. Even with episodes of fever. Nuclear magnetic resonance (NMR) with normal mesenteric vessels. Histopathological lesions: hyperkeratosis with dermis presenting extravasation of red blood cells with leukocyte infiltrates in small vessels. In hypodermis, the neutrophils and lymphocytes in the wall of medium caliber artery, suggestive of PAN. Decided therapy pulse therapy methylprednisolone and cyclophosphamide, monthly, and also enoxaparin.

CONCLUSION

Considering PAN a disease capable of causing extremely serious mutilating and disabling sequelae, it is important to enhance the early diagnosis and intervention with close monitoring in order to improve the prognosis of the disease.

KEYWORDS

Polyarteritis, Purplish lesions, Subcutaneous nodules.

Figure 1. Arthritis in right knee with presented erythematous and purplish lesions.

Figure 2. Atrophy of lower limb musculature. Arthritis in knees with erythematous and purplish lesions.

Figure 3. Edema and erythematous and violaceous lesions in the hands.

Figure 4. Purplish lesion on the 1st polydactyl of the left foot.