Epistaxis as first manifestation of acute adult idiopathic thrombocytopenic purpura. Clinical case

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ABSTRACT

Idiopathic thrombocytopenic purpura (ITP) is a common hematologic disorder characterized by immune-mediated platelet destruction; it is usually a benign, self-limiting disease in children. The disorder typically presents with purpura and petechiae after viral processes of the upper airway. We report a case of a young man who came to the Emergency department with a very severe epistaxis. After nasal package of the nose, a full blood count showed no platelets. Case series of epistaxis always refer to hematologic disorder and treatment but it is very rare to find epistaxis as the first sign of ITP. ITP was diagnosed and treatment for the disease was instituted with a favorable response.

Keywords: epistaxis; systemic disease; idiopathic thrombocytopenic purpura.

INTRODUCTION

The typical patient who consults in the Adult Emergency Department for an epistaxis is a man of middle age or older, with a posterior epistaxis and with comorbidities or associated treatment[1]. When a person is admitted in the Emergency Department for epistaxis and he does not meet both of these criteria, we must be aware and suspect a possible undiagnosed underlying disease. ITP is a purpuric syndrome, which usually occurs in children, with a decreased number of platelets in the absence of other pathology and normal coagulation studies.

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CLINICAL CASE

A 27-year-old patient was admitted to the Emergency Department, presenting an epistaxis in both nostrils, of several hours of evolution, which hasn't stopped with anterior nasal packing done by the patient. On examination, nasal bleeding was observed in both nostrils, haemorrhagic bullae in the oral mucosa and in the lateral border of tongue, and petechiae in legs, body and upper limbs. A consultation was requested to Dermatology. There were no palpable lymph nodes or abdominal masses or organ enlargements. The patient reported having suffered the previous week a viral fever, rash on the trunk and rinoconjuntival symptoms, compatible with measles. The bleeding was controlled with bilateral anterior nasal packing with Merocel® and a full blood count was made, which results are shown in Table 1. With these results, the patient was admitted in the hospital and a Haematology consultation was requested.

TABLE 1
Analytical values on hospital admission

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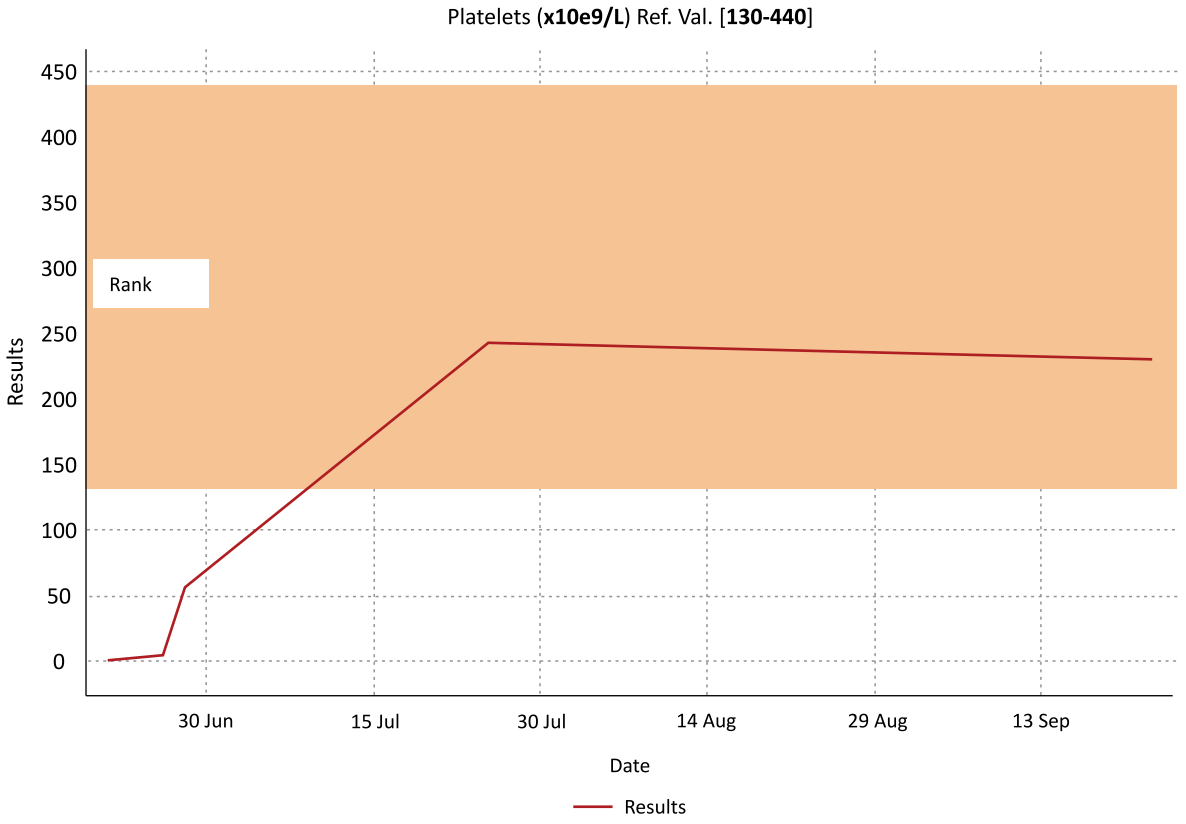
Biochemical markers:	Blood glucose 136 mg/dL. Potassium 3.0 mEq/L. Sodium 127 mEq/L. Blood urea 65 mg/dL.
Complete Blood Count:	Leukocytes 8.49 x 109/L. Neutrophils 5.0 x 109/L. Lymphocytes 2.5 x 109/L. Monocytes 1.0 x 109/L. Haemoglobin 169 g/L, Platelets 0.
Coagulation test:	Normal
Peripheral blood smear	Platelet microaggregations are not observed; some isolate platelet

The final diagnosis was ITP and the patient underwent a treatment with corticosteroids and antifibrinolytics. The patient improved and was discharged five days later, after reaching a platelet count greater than 50x109 / L. A follow-up in the outpatient haematology department was performed, as the patient did a course of oral prednisone for ten days. The control blood count three months later showed a platelet count of 231x109 / L and the examination of peripheral blood was normal.

FIGURE 1
Evolution of platelet level in analytical controls



DISCUSSION

Epistaxis is the most common ENT pathology treated at an emergency department, reaching in some series 13% of ORL emergencies[2]. It is usually a self-limited and benign condition. Most may resolve spontaneously or require only conservative measures[1]. However, although 60% of the adult population would have an episode of epistaxis in their lives, only 6 to 10% of these cases might require medical assistance[3]. The typical patient that demands urgent medical assistance due to epistaxis is a male, middle aged or older, with a posterior epistaxis and presenting a comorbidity or associated treatment[1].

Because of these facts, when faced with a young patient without comorbidities or associated treatments, we must suspect the existence of another underlying undiagnosed disease. In our case, the clue was the presence of a bilateral epistaxis, difficult to control in a patient with petechiae and the antecedent of measles. The full blood count showed absolute thrombocytopenia.

ITP is a purpuric syndrome that usually occurs in children, with a decreased platelet count, less than 100x109 / L, in the absence of acute infectious disease or systemic disorders and with normal coagulation studies. The patient presents have petechiae, purpura and risk of internal bleeding. Less common manifestations are bleeding in mucosas[4]. Thrombocytopenia occurs by the appearance of IgG antibodies against proteins Ib and IIb / IIIa, leading to phagocytosis of platelets by splenic macrophages. The first step in the treatment involves administration of steroids (metilprednisolone, Sanofi®) at 1 mg / kg weight per day to reduce autoantibody production and reduce phagocytosis of platelets. If control is not achieved, despite increasing the dose of steroids, the next step is to perform a splenectomy. If thrombocytopenia persists, the third step of treatment is the administration of immunosuppressants such as cyclophosphamide[5].

CONCLUSION

When a young person with epistaxis doesn't have comorbidities or associated treatments, we must be aware and suspect a possible undiagnosed underlying disease. ITP is usually a child's disease, which made this case quite unusual. A good medical history is essential for a good medical practice, and it was the key to achieve the final diagnosis.

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