Journal of Medical Care Research and Review

Volume 3| Issue 5| 2020

Atypical presentation of a pediatric Pyoderma gangrenosum in an immunocompetent child: Case report

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Abstract: Pyoderma gangrenosum is relatively rare in the pediatric population with only 4% cases, the most common presentation in children is in the form of disseminated ulcerative lesions. The pathophysiology of PG is still poorly understood. Its diagnosis is often delayed, with an average of 2 months; This is explained by the low prevalence of the disease in children and the fact that it is misdiagnosed on the one hand and by confusion with an ecthymagangrenosum. The PG is in fact a diagnosis of exclusion in histology; non-specific aseptic neutrophil infiltration, once the diagnosis of pediatric PG has been confirmed, the search for an underlying etiology should be undertaken. In our case, the balance of immune deficiency was normal.

Keywords: Pyoderma gangrenosum, multiple lesions, immunocompetent, Case report.

INTRODUCTION

Pyoderma gangrenosum (PG) is a neutrophilic dermatosis that rarely affects children. The clinical, epidemiological and therapeutic data on pediatric PG are poor, its associated pathologies, often newly reported are intestinal pathologies, hemopathies, vasculitis, immunodeficiency, pyogenic arthritis and PAPA syndrome. More than half of the cases occur without an underlying disease. We report a case of disseminated ulcerative pyoderma in an immunocompetent infant.

CASE PRESENTATION

He is a nine-month-old male infant from nonconsanguineous parents with no significant medical history. The history of his illness dates back to 15 days before his admission with the appearance of an erythematous lesion affecting the seat, rapidly extensive, giving way to a loss of substance. The course was marked by the appearance of other similar lesions in the buttocks, back, limbs and face associated with a cough. On admission, he was feverish at 38.7 with multiple ill-defined irregularly contoured ulcers surrounded by an inflammatory halo and necrotic center. Similar lesions were noted at the sampling sites. In biology, an inflammatory syndrome with a leukocytosis at 37600 and a CRP at 94mg / L, the chest X-ray was without particularity, an assessment in search of a primitive immune deficiency, an HIV serology were negative and the skin sample objectifying a secondary infection at BGN. The skin histology was in favor of a PG.

DISCUSSION

In adults, PG especially in the lower limbs. (1) In children, pyoderma gangrenosum is a rare entity with only 4% of GP occurring. (2) The pathophysiology of PG is still poorly understood. It is a neutrophilic disorder characterized by an increase in pro-inflammatory production, in particular of cytokines, resulting in the destruction of tissue. Clinically, lesions in the pediatric population are disseminated ulcers and the lower limbs are most often affected. Contrary to what has been reported by Graham et al., (2) we have found that the ulcerative subtype is the most common presentation in children. PG lesions can start as pustules and ulcerate at a later stage. Extracutaneous manifestations are possible, including damage to the pulmonary, ocular and musculoskeletal systems. (3)

The diagnosis of pediatric PG is often delayed, with an average of 2 months; this can be explained by the rarity and low prevalence of the disease in children, therefore often misdiagnosed with other causes, notably infectious, or vasculitis. The diagnosis of PG is, in fact, a diagnosis of exclusion. (4) But the clinical presentation, with negative repeated cultures, should make one think of this diagnosis.

CONCLUSION

Generalized and ulcerative lesions are the most frequent initial clinical presentation of pediatric GP. Idiopathic cases represent 49% of cases. Its diagnosis should not be confused with serious skin infections.



Figure 1:1. Ill-delimited ulcers with irregular contours surrounded by an inflammatory halo and necrotic center. 2,3,4. Well limited ulcers with regular contours with an erythematous border.



Figure 2: 1,2. Similar lesions at the sampling sites, external sides of the right and left feet.

Conflicts of interest: Author declares that there is no conflict of interest

REFERENCES

- [1]. Pompeo MQ. Pyoderma gangrenosum: recognition and management. Wounds2016; 28: 7–13.
- [2]. Graham JA, Hansen KK, Rabinowitz LG, et al. Pyoderma gangrenosum in infants and children. PediatrDermatol1994;

11: 10–17. [SEP]

- [3]. Berk DR, Bayliss SJ. Neutrophilic dermatoses in children. PediatrDermatol2008; 25: 509–519.
- [4]. Su WP, Davis MD, Weenig RH, et al. Pyoderma gangrenosum: clinicopathologiccorrelation and proposed diagnostic criteria. Int J Dermatol 2004; 43: 790–800.