· Advances in Medical Sciences · Vol. 53(2) · 2008 · pp 338-340 · DOI: 10.2478/v10039-008-0013-0

A case of Gianotti Crosti syndrome with HBV infection

Dikici B[1], Uzun H[1*], Konca C[2], Kocamaz H[2], Yel S[2]

1 Department of Pediatrics, Duzce University School of Medicine, Duzce, Turkey
2 Department of Pediatrics, Dicle University School of Medicine, Diyarbakir, Turkey

* CORRESPONDING AUTHOR:
Department of Pediatrics,
Duzce University School of Medicine,
81620 Konuralp, Duzce, Turkey
telephone: +903805414107-2016; fax: +903805414105
e-mail: uzunhakan2003@yahoo.com (Hakan Uzun)

Received 28.03.2008
Accepted 22.04.2008
Advances in Medical Sciences
Vol. 53 · 2008 · pp 338-340
DOI: 10.2478/v10039-008-0013-0

ABSTRACT

Gianotti-Crosti syndrome (papular acrodermatitis of childhood), which was first described in 1955, is a nonspecific rash that usually consists of the abrupt onset of pink flesh coloring, smooth or lichenoid, flat-topped papules. It was first related to hepatitis B virus (HBV) infection; however, cases not associated with HBV infection were reported as well. Although a type of delayed hypersensitivity reaction is speculated as a cause, exact pathogenesis still remains unclear. The prognosis is favorable and successful management relies upon general supportive and symptomatic care. We report a seven-year-old boy diagnosed with Gianotti-Crosti syndrome with monomorphous papules on his cheeks, buttocks and extremities associated with hepatitis B virus infection.

Key words: Gianotti-Crosti syndrome, Hepatitis B infection

INTRODUCTION

Gianotti-Crosti syndrome (papular acrodermatitis of childhood) is a nonspecific rash that usually consists of the abrupt onset of pink flesh coloring, smooth or lichenoid, flat-topped papules 2 mm to 8 mm in diameter. The papules tend to be located more densely on the extremities, face, and buttocks. They are found less commonly on the torso. The flexural areas usually are spared [1-3]. This report considers a seven-year-old boy diagnosed with Gianotti-Crosti syndrome with monomorphous papules on his cheeks, buttocks, and extremities associated with hepatitis B virus infection (HBV).

CASE PRESENTATION

A seven-year-old boy was admitted to our clinic in spring 2005 because of an eruption on his extremities that had emerged 20 days ago. The eruption which was papular and was observed on all four extremities, especially on the hands and feet (*Fig. 1, 2*). Laboratory findings revealed an elevation of serum transaminases and hepatitis B surface antigen (HBsAg) and IgM type anti-hepatitis B core antibodies (Anti-HBc IgM) were positive. The patient had no past history of liver disease. He was diagnosed as having Gianotti-Crosti syndrome due to acute HBV infection because of typical eruption symptoms and serum HBV markers. This eruption gradually cleared and disappeared within 4 weeks. No treatment was needed for skin lesions. High serum transaminase levels decreased from 2300 IU/L to normal ranges within six weeks. Icterus was not observed during the course of the disease. Four months later, HBsAg was negative and anti-HBs antibody development was observed.

DISCUSSION

Fernando Gianotti described Gianotti-Crosti syndrome in 1955 [1]. It was originally called papular acrodermatitis of childhood (PAC) and was subsequently found to be associated with HBV infection [2,3]. Later, children with a similar rash without HBV were reported which was later called papulovesicular acrolocated syndrome (PVAS) [2]. The exact pathogenesis of this condition is not clear, but it may represent a type of delayed hypersensitivity reaction [4].

The list of conditions associated with Gianotti-Crosti syndrome is long and continues to grow. The disease has been associated with hepatitis A virus, HBV, hepatitis C virus,

Figure 1. **Typical eruptions of Gianotti-Crosti syndrome.**

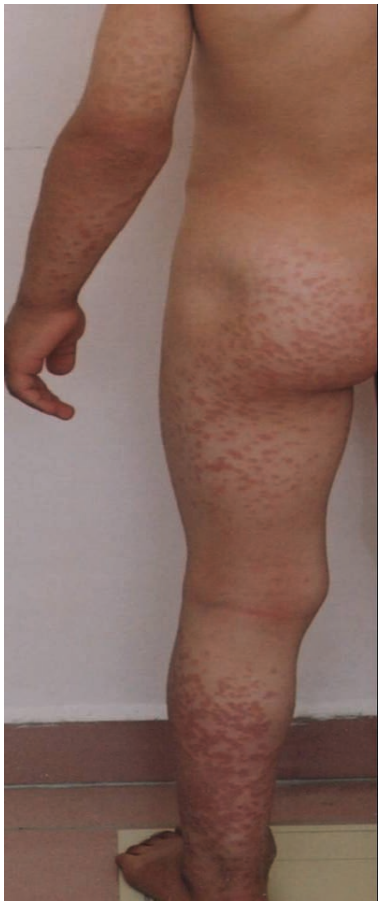
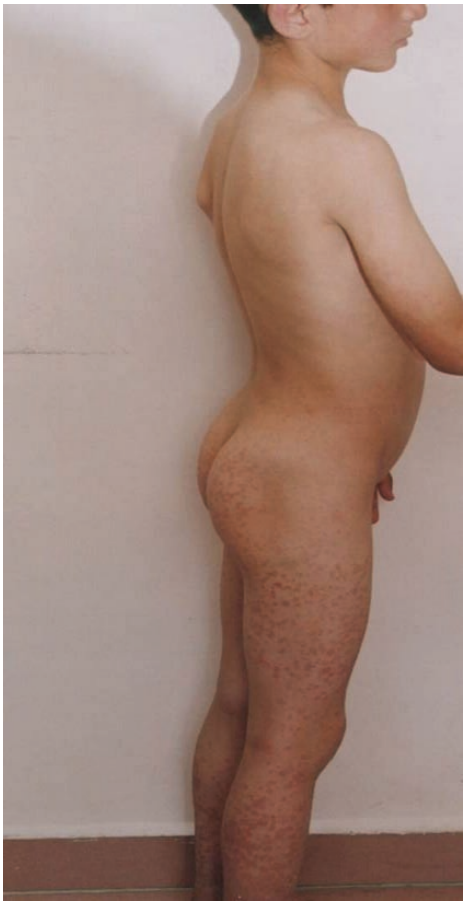


Figure 2. **Typical eruptions of Gianotti-Crosti syndrome.**



Epstein-Barr virus, cytomegalovirus, coxsackievirus, HIV, human parainfluenza virus, echovirus, human parvovirus B19, respiratory syncytial virus, human herpesvirus 6, rotavirus, and adenovirus infections [2,5]. The syndrome also has been associated with immunizations, including those for poliomyelitis, influenza, pertussis, diphtheria, and measles-mumps-rubella [4,5].

Adults have also been afflicted with this disorder, it is most common in children between the ages of 3 months and 15 years and has a peak incidence between the ages of 1 and 6 years [6,7]. Our case was diagnosed at the age of seven. Because of the benign self-limited nature of Gianotti-Crosti syndrome, most cases are not reported, and the overall incidence is unknown. Frequency probably parallels the incidence of a precipitating infection in a specific geographic region [8].

Results from standard laboratory tests usually are normal but may show a finding such as lymphocytosis or leucopenia, depending on the inciting condition. If hepatitis is the cause, elevated liver enzyme levels and a panel positive for hepatitis should be noted [6]. Our case did not reveal any clinical or laboratory findings either, except for those supporting acute hepatitis B infections.

As a medical care, education and reassurance are usually sufficient for concerned parents. Some children may require general supportive and symptomatic care for the associated viral or streptococcal infection. Application of soothing, anti-itch topical preparations with menthol, colloidal oatmeal, or pramoxine in conjunction with oral antihistamines may be useful for the relief of pruritus. Avoidance of topical steroid use is advised. No medication was needed in our case.

CONCLUSIONS

Gianotti-Crosti syndrome is generally a benign, self-limited condition with only rare complications, which may be attributed to acute HBV infection. The eruption usually starts to resolve after 6-8 weeks. The prognosis is excellent.

REFERENCES

1. Gianotti F. Report on a special case of toxic infection characterized by a desquamative erythemato-infiltrative eruption with lenticular foci and a selective localization at the extremities. Soc Ital Dermatol Sifilogr Sezioni Interprov Soc Ital Dermatol Sifilogr. 1955 Nov-Dec;96(6):678-97.

2. Gianotti F. Gianotti-Crosti syndrome. Br J Dermatol. 1968 May;80(5):342-3.

3. Balevicienė G, Maciulevicienė R, Schwartz RA.

Papular acrodermatitis of childhood: the Gianotti-Crosti syndrome. Cutis. 2001 Apr;67(4):291-4.

4. Magyarlaki M, Drobnitsch I, Schneider I. Papular acrodermatitis of childhood (Gianotti-Crosti disease). Pediatr Dermatol. 1991 Sep;8(3):224-7.

5. Hofmann B, Schuppe HC, Adams O, Lenard HG, Lehmann P, Ruzicka T. Gianotti-Crosti syndrome associated with Epstein-Barr virus infection. Pediatr Dermatol. 1997 Jul-Aug;14(4):273-7.

6. Balevicienė G, Maciulevicienė R, Schwartz RA. Papular acrodermatitis of childhood: the Gianotti-Crosti syndrome. Cutis. 2001 Apr;67(4):291-4.

7. Murphy LA, Buckley C. Gianotti-Crosti syndrome in an infant following immunization. Pediatr Dermatol. 2000 May-Jun;17(3):225-6.

8. Brandt O, Abeck D, Gianotti R, Burgdorf W. Gianotti-Crosti syndrome. J Am Acad Dermatol. 2006 Jan;54(1):136-45. Epub 2005 Dec 2. Review.