Case report

Co-amoxiclav-induced Stevens Johnson Syndrome in a child

Neila Fathallah¹, Zayani Hanen², Raoudha Slim¹, Lobna Boussofara³, Ghariani Najet³, Kamel Bouraoui¹, Chaker Ben Salem¹,*

¹Professor of Clinical Pharmacology, Department of Clinical Pharmacology, Faculty of Medicine of Sousse, Tunisia, ²Emergency Health Technician, Intensive Care Department, Sahloul Hospital, Sousse, Tunisia, ³Assistant professor of Dermatology, Farhat Hached University Hospital, Sousse, Tunisia

*Corresponding author: Dr Chaker Ben Salem, Department of Clinical Pharmacology, Faculty of Medicine of Sousse, Avenue Mohamed Karoui, 4002 Sousse (Tunisia), B.P.126

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Abstract

Stevens-Johnson Syndrome is an uncommon life threatening disease generally induced by drugs. Antibiotics, mainly sulphonamides, are the most involved drugs in Stevens-Johnson Syndrome in children. Co-amoxiclav is a well tolerated antibiotic. It has never been reported to cause, lonely this syndrome in children. Herein, we report a co-amoxiclav-induced Stevens-Johnson Syndrome occurring in an 18-month-old child. The diagnosis of SJS is often challenging in children and other possible diseases should be ruled out. The etiology of this syndrome is not yet fully understood. It is thought to be mediated by an immunologic mechanism. Management involves early identification, withdrawal of the culprit drug and rapid initiation of supportive therapies.

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Introduction

Stevens-Johnson syndrome (SJS) is a mucocutaneous disease associated with significant morbidity and mortality. It is a relatively uncommon disorder in children and it is generally induced by medications [1]. Antibiotics, mainly sulphonamides, are the most involved drugs in SJS in children. Co-amoxiclav is a generally well tolerated antibiotic. It has never been reported to cause, lonely this syndrome in children. Hence, we report the first case of co-amoxiclav-induced SJS occurring in an 18-month-old child.

Patient and observation

An 18-month-old child was admitted to general pediatric department for accidental ingestion of caustic solution. He had no significant past medical history. Early esophagogastric endoscopy was performed showing severe esophagogastric necrosis. Parenteral nutrition was started and the child was treated by systemic corticosteroids (0.1 mg per kg daily) and omeprazole (10 mg daily). He was discharged home wi 90% of cases occurred in children [2].

The diagnosis of SJS is often challenging in children and other possible diseases should be ruled out. Staphylococcal scalded skin syndrome, fixed bullous drug eruption, linear Ig A dermatosis, drug-induced pemphigus and bullous pemphigoid and acute generalised exanthematous pustulosis are differential diagnoses that should also be considered [8]. Staphylococcal scalded skin syndrome is linked to a phage group 2 Staphylococcus aureus infection. Distinction from SJS is based on the absence of an antecedent macular rash (infrequently there is a scarlatiniform eruption) and absence of mucosal lesions and of internal organ involvement.

The etiology of SJS is not fully understood. Immunologic mechanisms, reactive drug metabolites, or interactions between these two have been reported in several reviews. Specific drug hypersensitivity induces a major histocompatibility class I-restricted drug presentation and leads to an expansion of cytotoxic T lymphocytes, and consequently an infiltration of skin lesions with cytotoxic T-lymphocytes and natural killer cells. Other findings suggest activation of the perforin/granzyme pathway as a cytotoxic mechanism in SJS. Recent findings suggest that granulysin probably is the key mediator for disseminated keratinocyte death in SJS [9]. Management of SJS involves early identification and withdrawal of the culprit drug, rapid initiation of supportive care by fluid and electrolyte replacement, acid-base and metabolic equilibrium regulation, serum protein and blood glucose control and topical skin management. Adjuvant treatments such as corticosteroids and immunosuppressants may also be used in severe cases of SJS [9].

Conclusion

Clinicians should be conscious of the risk of co-amoxiclav-induced SJS in children in order to avoid a fatal outcome. Management involves early identification, withdrawal of the culprit drug and rapid initiation of supportive therapies.

Competing interests

The authors declare no competing interests.

Authors contributions

All authors have contributed equally to this work and have read and approved the final version of the manuscript.

Figures

Figure 1: Erythematous rash with flaccid blisters affecting the trunk
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Figure 1: Erythematous rash with flaccid blisters affecting the trunk