

Dose-Related Aripiprazole-Induced Acneiform Rash: About A Case

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Abstract

Case Report

Acneiform rash is a commonly reported side effect with certain types of medications, including antipsychotic agents. Its clinical presentation consists mainly of papulopustular lesions. Other types of lesions, such as nodular or cystic, can also be observed [1, 2]. Here we present a case of aripiprazole-induced acneiform eruptions with dose-dependent severity.

Keywords: Acneiform rash, aripiprazole, dose dependent.

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INTRODUCTION

Drug-induced acneiform eruption is a subordinate type of acne characterized by inflammation of the follicles, but is clinically very different from typical “acne” [3]. Common side effects of aripiprazole include tremor, akathisia, and dry mouth [4]. However, aripiprazole-induced acneiform rashes are rarely reported so far [5, 6]. Here we report a dose-related case of aripiprazole-induced acneiform rash. Our work consists of reporting the possibility of occurrence of acneiform eruptions induced by aripiprazole with dose-dependent severity.

CASE HISTORY

A 25-year-old boy presented with a monomorphic, pruritic, papulopustular eruption symmetrically on the trunk and both proximal extremities for several months (Fig 1). He was taking 5 mg of aripiprazole daily to treat his psychosis. A few months after treatment, the lesions began to grow. He increased the dose from 5 mg/day to 10 mg/day and the lesions worsened after 1 month of increasing the dose.

For histological analysis, a punch biopsy was performed on the skin of his back. The biopsy specimen showed irregular acanthosis in the epidermis and neutrophil infiltration with eosinophils in the upper dermis consistent with folliculitis. His psychiatric symptoms were well controlled with the medication, so we decided to maintain him with the addition of oral isotretinoin 20 mg/day. After 1 month of follow-up, the lesions improved significantly and isotretinoin was stopped accordingly. Two months after stopping

treatment, the dose of aripiprazole was reduced to 5 mg/day.



Fig 1: Multiple erythematous papules with pruritic, symmetrical, monomorphic erythematous pustules on the trunk and both proximal extremities for several months

DISCUSSION

Although there are no specific diagnostic criteria for drug-induced acneiform rashes, the clinical features that support them include: unusual age of onset, unusual severity of acne outbreak, the monomorphic pattern, the absence of comedones and cysts, the unusual distribution of acne such as the trunk and arms, and the delay in appearance after recent drug administration [1].

From the above, we diagnosed our case as drug-induced as the lesions presented a monomorphic pattern with symmetry, unusual onset and distribution, delayed onset, and histopathology of eosinophilic infiltration and neutrophils [7].

Two cases are reported concerning a 23-year-old Indian man who developed a papulopustular rash on the face 10 days after starting aripiprazole [4] and a 34-year-old Spaniard who presented with a rash on the back after 6 weeks of treatment with aripiprazole. aripiprazole [5].

Our case also appeared in a young man and responded to isotretinoin, however, unlike the previous one, the severity of the rash in our case worsened after the dose of aripiprazole was doubled. Severity of the acneiform rash appears to be dose-related, as the lesions spread after increasing the dose of aripiprazole.

Furthermore, the histological finding of neutrophilic and eosinophilic infiltration indicates immunological hypersensitivity reactions [8]. These results suggest that aripiprazole-induced acneiform eruptions may have additional pathogenesis, such as pharmacological reactions as well as immunological mechanisms, and that the acne formation pathway would be stimulated by such reactions. This is also consistent with the response to isotretinoin which acts by inhibiting the main etiological factors involved in acne, regardless of the hypersensitivity mechanisms.

CONCLUSION

Acneiform rash is a side effect frequently reported with certain types of medications. Our observation draws attention to the possibility of occurrence of acneiform eruptions induced by aripiprazole with dose-dependent severity.

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