

Unfamiliar Manifestations of Anti-tubercular Therapy

Ramesh Aggarwal, Shridhar Dwivedi¹, Meenakshi Aggarwal²

Assistant Professor, Department of Medicine, Lady Hardinge Medical College and Associated Smt. S.K. Hospital, New Delhi
¹Dean, Professor, Department of Medicine/Preventive Cardiology, Hamdard Institute of Medical Sciences and Research and HAH Centenary Hospital, Jamia Hamdard (Hamdard University), ²Assistant Professor, Department of Microbiology, Lady Hardinge Medical College and Associated Smt. S.K. Hospital, New Delhi, India

ABSTRACT

Cutaneous drug reactions are frequent in hospitalized patients and vary from simple manifestations like rash and erythema to severe life threatening conditions like angio-oedema, erythroderma, Stevens-Johnson syndrome and toxic epidermal necrolysis. However drug eruptions with antitubercular drugs are largely unknown except few case reports. We highlight here one similar case which presented with pleomorphic cutaneous manifestations after taking anti tubercular therapy and closely mimicked vasculitis. But when the offending drugs were stopped the lesions disappeared and the patient improved.

Keywords: Antitubercular therapy, cutaneous drug reactions, vasculitis

Introduction

Adverse cutaneous reactions with drugs are well-known and are present in about 2-3% of hospitalized patients.^[1,2] These reactions vary from simple manifestations like a rash and erythema to severe life-threatening conditions such as angioedema, erythroderma, Stevens-Johnson syndrome and toxic epidermal necrolysis. Cutaneous drug eruptions with anti-tubercular drugs are largely unknown except few case reports. We highlight here one similar case, which presented with pleomorphic cutaneous manifestations after taking anti-tubercular therapy and closely mimicked vasculitis. However, when the offending drugs were stopped the lesions disappeared and patient improved.

Case Report

A 48-year-old married male, tobacco user presented with darkening of skin of the right leg and appearance of red colored spots on his abdomen since last 1 week. There was no history of fever, joint pains and bluish discoloration of fingers or bleeding from any site. He was diagnosed as a case of tuberculosis of the ankle joint 3 weeks before presenting to us and started taking anti-tubercular therapy since then.

Examination of the right leg showed blackening of skin overlying anterior aspect of the tibia and foot [Figure 1]. There were hyperkeratotic purpuric eruptions on the left leg [Figure 2] and red macular lesions of varying size over the lower part of abdomen [Figure 3]. There was mild tenderness over the right leg and dorsalis pedis artery was palpable in both limbs. Systemic examination was normal. A provisional diagnosis of cellulitis with vasculitis was made and skin biopsy was planned. His other significant investigations were the thin-layer chromatography-11,600/cu mm, erythrocyte sedimentation rate 29 mm/1st h, perinuclear anti cytoplasmic antibody pANCA and anti-saccharomyces cerevisiae antibodies negative, rheumatoid factor: <8 IU/mL. Patient was started with amoxicillin and clavulanic acid along with anti-inflammatory drugs. However, his condition did not change. Skin biopsy reported negative for any changes of vasculitis. Suspecting it as the case of drug reaction we stopped anti-tubercular drugs isoniazid, rifampicin, pyrazinamide and ethambutol, which the patient was taking in a fixed dose regime. After 2 days, the eruptions over abdomen disappeared. The skin changes over legs did not progress any further.

Discussion

This patient presented with primarily dermatological manifestations. Patient had three different manifestations of skin changes - Maculopapular eruptions, hyperkeratotic purpuric

Access this article online

Quick Response Code:



Website:
www.jfmpc.com

DOI:
10.4103/2249-4863.130327

Address for correspondence: Dr. Ramesh Aggarwal,
Department of Medicine, Lady Hardinge Medical College and
Associated Smt. S.K. Hospital, New Delhi - 110 001, India.
E-mail: rameshlhmc@gmail.com



Figure 1: Dark skin over right leg and foot



Figure 2: Hyperkeratotic purpuric eruptions on left leg

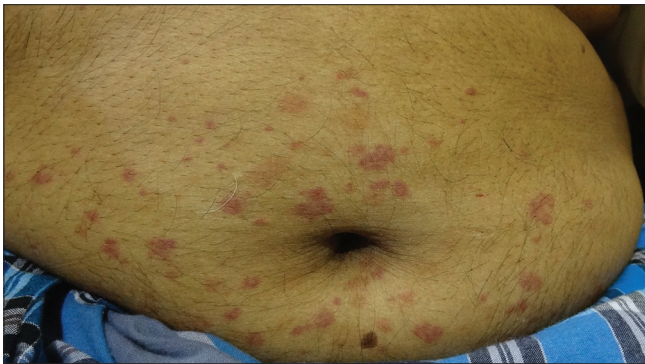


Figure 3: Red macular lesions of varying size over lower part of abdomen

eruptions on the left leg and dark black skin over the right leg. The maculopapular eruptions are common adverse effect of various drugs such as penicillin, sulfonamides, phenytoin and

gold.^{13,41} Vasculitis was suspected as a probable cause for the other two dermatological manifestations. However, the biopsy report from the lesions did not support our diagnosis and an alternate diagnosis of adverse drug reaction from anti-tuberculosis treatment (ATT) was framed.

Dermatological reactions due to ATT are rare. Pyrazinamide has been associated with erythema multiforme in a case report.¹⁵ The different skin lesions in this case did not progress once we stopped the anti-tubercular therapy. However, as this patient was on a combination pill of four anti-tubercular drugs we could not localize the exact drug responsible for this reaction. Neither was it possible to reintroduce the drugs and observe for the reappearance of lesions as patient was suffering from significant morbidity because of his black skin and other lesions on legs.

Conclusion

Tuberculosis is endemic in India and its treatment has been made equally friendly with the introduction of directly observed treatment, short-course and easy availability of anti-tubercular drugs. Although adverse skin reactions are relatively rare with these drugs, but awareness of these reactions is important for early diagnosis and better management of such patients.

References

1. Crowson AN, Brown TJ, Magro CM. Progress in the understanding of the pathology and pathogenesis of cutaneous drug eruptions: Implications for management. *Am J Clin Dermatol* 2003;4:407-28.
2. Wolkenstein P, Revuz J. Drug-induced severe skin reactions. Incidence, management and prevention. *Drug Saf* 1995;13:56-68.
3. Bologna JL, Braverman IM. Skin manifestations of internal disease. In: Braunwald E, Fauci AS, Kasper DL, Hauser SL, Longo DL, Jameson JL, editors. *Harrison's Principles of Internal Medicine*. 15th ed. New York: McGraw-Hill; 2001. p. 315-31.
4. Bigby M. Rates of cutaneous reactions to drugs. *Arch Dermatol* 2001;137:765-70.
5. Perdu D, Lavaud F, Prévost A, Deschamps F, Cambie MP, Bongrain E, *et al.* Erythema multiforme due to pyrazinamide. *Allergy* 1996;51:340-2.

How to cite this article: Aggarwal R, Dwivedi S, Aggarwal M. Unfamiliar manifestations of anti-tubercular therapy. *J Fam Med Primary Care* 2014;3:72-3.

Source of Support: Nil. **Conflict of Interest:** None declared.