A RARE CASE OF ETHAMBUTOL INDUCED MACULOPAPULAR SKIN RASH IN A PATIENT OF POTT'S SPINE (D2-D7)

Shiv Kumar Verma and Dr Seema Singh
Department of Respiratory Medicine King Georges Medical University, Lucknow (U.P.) India

DOI: http://dx.doi.org/10.24327/ijrsr.2020.1102.5072

ARTICLE INFO

ABSTRACT
Ethambutol is a commonly used first line antitubercular drug. It is an effective antituberculosis drug, is generally well tolerated, its main adverse reaction being optic neuritis. Other uncommon adverse effects include arthralgia, maculopapular skin rash, and peripheral neuropathy. We reported a case of late onset Ethambutol induced skin rashes in pott’s spine patient.

INTRODUCTION
Spinal TB is the most common form of skeletal involvement. Antituberculosis drug treatment for skeletal TB is essentially the same as for TB elsewhere in the body. Ethambutol is one of the first line antitubercular drugs, used in the management of tuberculosis in combination with other drugs. Most common adverse effect due to ethambutol use is retrolbulbarneuritis. Rare adverse effects are generalized cutaneous reactions, arthralgia, peripheral neuropathy and very rarely hepatitios. We hereby report a case of maculopapular rash due to ethambutol in a patient undergoing antitubercular treatment which is non immediate.

Case Report
A 29 year old female, belonging to a lower class family visited to our department with complaints of back pain since 6 months, skin rashes all over body and itching on taking antitubercular drugs. Patient diagnosed as a case of pott’s spine from department of neurology and started with first line TB drugs –Isoniazid, Rifampicin, Pyrazinamide, Ethambutol with effect from 08/06/2018. She took ATT well till 10/09/2018. After taking 3 months ATT, she developed maculopapular skin rashes along with itching all over body. She stopped ATT herself and concerned in our OPD after a gap of 4 months. Patient admitted to our department on 10/01/2019. Her blood investigation has been done.

HB:14.6gm/dl, TLC:27000cells/cumm, neutrophils: 84%, lymphocytes: 06%, eosinophils:06%, monocytes: 04%, absolute eosinophil count:1620 cells /cumm, s.bilirubin total:1.22mg/dl, SGOT: 33.1IU/L, SGPT: 27.9 IU/L, s .alk phosphatase:170 IU/L, s.urea: 26.0 mg/dl, s.creatinine:0.88 mg/dl, s.protein: 7.34gm/dl, s.albumin:4.01gm/dl, s.Na:138.8mmol/l, s.K:5.0mmol/l, s.Ca:5.93 mg/dl. Sputum for AFB negative. Elisa for HIV negative .Chest x ray done. No pleuroparenchymal disease seen. MRI study reveals altered marrow signals are seen involving D2 to D7 vertebral bodyed with complete collapse of D4 & D5 bodies likely suggest resolving infective spondylodiscitis (pott’s) with residual activity. D4-D5 disc is involved. Minimal ventral epidural soft tissue is seen at D4-D5 level causing compression over thecal sac &cord with focal residual myelopathy. No pre & paravertebral soft tissue is seen.

*Corresponding author: Shiv Kumar Verma
Department of Respiratory Medicine King Georges Medical University, Lucknow (U.P.) India
Patient started isoniazid 50 mg low dose on day 12/01/2019. Patient kept under observation. On 13/01/19 isoniazid 300 mg added. No major adverse event seen. On 14/01/19 Rifampicin (R)+Isoniazid (H) half tab given (600+300) and on 15/01/19 full dose. No adverse effect seen. On 16/01/19 Pyrazinamide (Z) half dose (750mg as weight was 55 kg) added. On 17/01/19 full dose of R+H+Z given. On 18/01/19 Ethambutol 400 mg given. After 4 to 5 hours patient developed maculopapular skin rashes along with itching all over body. On next day all ATT stopped and dermatology opinion taken. Antihistaminic along with sarna lotion (locally applicable) advised. Ethambutol withheld and other ATT started. Patient kept under observation 2 to 3 days. No major adverse effect seen. As patient already has taken Z adequately so patient discharged on R+H (RNTCP guideline 2018) and advised to follow up in our OPD.

**DISCUSSION**

Dermatological reactions due to ethambutol are rare. In a case report P.C. Wong et al.² mentioned ethambutol induced pulmonary eosinophilia³ and skin rashes, which was started on day 3 after initiation of ATT. Our study shows a late onset ethambutol induced maculopapular skin rashes. The management of such reaction needed withdrawal of suspected drug and management of symptoms if any. In this study, the suspected drug was stopped immediately following the ADR and antihistamines were added to manage associated itching due to drug reaction, to which patient responded well.

**CONCLUSION**

Since ethambutol is a common drug used in TB management, and TB is also a common problem in countries like India, the dermatological manifestations due to ethambutol gain attention. Upon occurrence of dermatological manifestations, the patients may become noncompliant, which is one of the common cause with other anti-Tb drugs for treatment failure in TB therapy. Although skin reactions due to ethambutol are not well reported, one should be suspicious of maculopapular rashes due to ethambutol also. Upon occurrence, the suspected drug(s) should be stopped immediately and the patient should be managed symptomatically. The patients undergoing treatment on an outpatient basis should be counseled for the early recognition of dermatological manifestations.

**References**