

LETTER TO EDITOR (VIEWERS CHOICE)

EXTENSIVELY-DRUG RESISTANT TUBERCULOSIS (XDR-TB)

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A 15 years old boy presented with swelling over left flank for 1 month. Ultrasound and MRI spine showed bilateral psoas abscess and left flank abscess. Flank abscess was aspirated and pus showed acid fast bacillus (AFB) on smear. He was started on first line anti-tuberculous therapy consisting of isoniazid (H), rifampicin (R), pyrazinamide (Z) and ethambutol (E). HIV ELISA was negative. He was also suffering from nephrotic syndrome but was in remission since past 7 months. His abscess culture grew mycobacterium tuberculosis (MTB) after 6 weeks which was resistant to HRZE, streptomycin (S), ofloxacin (Ofx), moxifloxacin (Mfx), kanamycin (km), amikacin (Am), ethionamide (Eto), capreomycin and only sensitive to PAS and clofazimine (Cfz). He was started on PAS, Cfz, Cycloserine, linezolid and first line ATT was stopped. After 2 months, he had right hip pain. MRI spine showed increase in size of psoas abscess. He underwent drainage of psoas abscess following which his pain decreased. By the end of 4 months of above treatment, his psoas abscess and flank abscess were not seen on ultrasound. He was given the above ATT for 2 years and had no residual disease on ultrasound.

Extremely-drug resistant (XDR) tuberculosis (TB) is caused by an isolate of MTB confirmed to be resistant in vitro to at least HR and is also resistant to fluoroquinolone and either aminoglycosides or capreomycin or both.¹ Multi-drug resistance (MDR) occurring primarily as a consequence of poor treatment services, could lead to emergence of XDR-TB if MDR-TB is not managed properly.² In children, drug resistant (DR) TB may occur when in contact with adults having DR-TB.³ Children who have received treatment for DR-TB have generally tolerated the second-line drugs well.^{4,5} Duration of treatment for XDR TB recommended is for a minimum of 24 months.¹ Similarly, our patient was treated for 2 years and responded well to treatment.

Most of the second-line anti-tubercular drugs like fluoroquinolones and aminoglycosides are routinely available over the counter and are misused to treat trivial illnesses, including upper respiratory tract infections, which will increase the overall level of

resistance in the community.⁶ With now XDR-TB seen in children, a strict vigilance for DR-TB in children is required and appropriate treatment accordingly should be given.

Compliance with Ethical Standards

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Conflict of Interest None

References:

1. Guidelines for the programmatic management drug resistant tuberculosis. Geneva, World Health Organisation, 2006 (WHO/TB/2006.6)
2. TB India 2010: RNTCP Status Report by Central TB Division, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India. Accessed on 24/02/2012.
3. Shah I, Chilkar S. Clinical Profile of Drug Resistant Tuberculosis in Children. Indian Pediatr. 2012 Jun 10. pii: S097475591101060-2. [Epub ahead of print]
4. Kapil A. The challenge of antibiotic resistance: need to contemplate. Indian J Med Res 2005; 121: 83-91.
5. Swanson DS, Starke JR. Drug resistant tuberculosis in pediatrics. Pediatr Clin North Am. 1995; 42: 553-581.
6. Mukherjee JS, Joseph JK, Rich ML, Shin SS, Furin JJ, Seung KJ, et al. Clinical and programmatic considerations in the treatment of MDR-TB in children: a series of 16 patients from Lima, Peru. International Journal of Tuberculosis and Lung Disease, 2003, 7(7):637- 644.

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