Reviewer's report

Title: Multidrug Resistant M. tuberculosis from Multiple Cutaneous Abscesses in a Patient with Polymyositis: Response to treatment

Version: 5 Date: 26 October 2004

Reviewer: Hendrik Simon S Schaaf

Reviewer's report:

General

The manuscript is much improved. If I may, I have some suggestions regarding the abstract (for it to reflect more correctly the case report), editing/language and the conclusion. Here are some important suggested changes:

Abstract:

A 23-year old HIV-negative male, receiving immunosuppressive therapy for polymyositis, presented with a cutaneous abscess in the neck and regional lymphadenopathy caused by a drug susceptible strain of Mycobacterium tuberculosis. He was started on a 4-drug antituberculosis regimen to which he supposedly was adherent. He was readmitted 6 months later with miliary tuberculosis and multiple cutaneous abscesses. The M. tuberculosis strain isolated from all abscesses and sputum culture was confirmed to be identical to the initial strain with restriction fragment length polymorphism (RFLP) analysis and phage assay. The strain was now resistant to 9 antituberculosis drugs according to susceptibility testing by BACTEC 460TB system and Loewenstein Jensen media (with antitubercular drugs in different concentrations). The patient was cured after immunosuppressive treatment was withdrawn, all cutaneous abscesses were surgically drained and patient was treated for 1.5 years on a 6-drug antituberculosis regimen.

Background:

1. 3rd line: …TB in India …
2. 5th line: Cutaneous TB was rare (0.1%) and of these lupus vulgaris….
3. 10th line: However, atypical mycobacteria such as M. kansasii and M. scrofulaceum,…
4. Last line: … young man with polymiositis on immunosuppressive therapy.

Case Report

1. Some paragraph breaks needed.
2. 7th line: …normal chest radiograph findings and sputum microscopy was negative for acid-fast bacilli (AFB).
3. 8th line: He was readmitted 6 months later with…
4. 10th line: Chest radiograph was again normal.
5. The organism grew after 5 weeks .. Replace with: M. tuberculosis was cultured and confirmed by niacin….
6. Last line page 3: … with a 4-drug regimen
7. Paragraph break at: The patient returned...
8. 9th line page 4: Two of 3 consecutive early-morning sputum samples...
9. Last 3 lines of case report: Treatment was supervised for 2 months and thereafter given unsupervised to a total of 18 months. The patient…

Discussion:
1. 6th line: …at 6 months interval, but contrary to…
2. 9th line: …As far as could be ascertained, this is the first case…6 moths before
3. 2nd paragraph, 3rd line: strain (spelling)
4. Page 6: 2nd paragr, 1st line: … results in the second episode were…
5. 6th last line page 6: ..was found in patients on… (same next sentence)
6. The liver and spleen are…lungs, bone marrow and kidneys. … In our case there was no other organ involvement.
7. Page 7, 5th line: …of new skin abscesses with…
8. 2nd paragraph, end of first sentence: … patient was cured.
9. Last sentence: The active lesions on the chest radiograph …
10. A comment: What about further long term follow-up of this patient? Was this done?

Conclusion:
The authors should be careful in their conclusion as not to give the impression MDR TB is common under these circumstances. If I may suggest a different angle to the conclusion, I would think that the following is more suitable:

Severe immunosuppression may lead to disseminated TB such as miliary TB or other rare types of extra-pulmonary TB such as cutaneous abscesses. Follow-up of patients is important, and if response to treatment is poor, adherence to treatment, drug resistance or other possible reasons such as continuation of immunosuppressive therapy should be considered. In this case intervention by drainage of abscesses, discontinuation of immunosuppressive treatment and possibly long-term treatment with additional second line antituberculosis drugs eventually lead to cure.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No

Declaration of competing interests:
None