Tuberculosis: an Old but Still Fascinating Disease

C. Ruef

In this issue of *Infection* we are publishing five papers that deal with various aspects of tuberculosis [1–5]. The first two manuscripts are reviews on the topic of latent tuberculosis and its pathogenesis. While Cardona proposes that constant endogenous reinfection with *Mycobacterium tuberculosis* occurs [1], Ehlers discusses other hypotheses to explain latency, such as persistence of the bacteria in a “lazy” state within granulomatous lesions and an ongoing dynamic immunological interplay between *M. tuberculosis* and the host that requires continuous recruitment of cells into the granuloma [2]. He also discusses the view that dormant *M. tuberculosis* may reside within alveolar epithelial cells in the lung and in adipocytes, which may become reactivated by certain factors. I consider both views interesting to read and stimulating for further research.

On a more practical level, the manuscript by Lee et al. investigates the sensitivity, specificity and positive and negative predictive values of modern T-cell-based assays and the more traditional tuberculin skin test to diagnose latent tuberculosis infection in patients with end-stage renal disease on hemodialysis [3]. These papers are accompanied by a short report on interleukin-6 blood levels in patients with tuberculosis. Correia et al. [4] found that IL-6 levels were increased in pulmonary tuberculosis independent of drug resistance. Finally, a case of spontaneous splenic rupture in the context of an immune reconstitution inflammatory syndrome is described in a HIV type 1-infected patient with tuberculosis [5]. While the splenic rupture was not primarily associated with tuberculosis, tuberculosis definitively played a role in the pathogenesis of the immune reconstitution inflammatory syndrome that occurred 10 days after initiating highly active anti-retroviral therapy. This case illustrates the

complexity of treatment in patients co-infected with HIV and *M. tuberculosis*.

While five articles on tuberculosis in one issue of *Infection* may appear to be a lot, this aggregation of publications on one topic mainly illustrates the importance of tuberculosis and also the broad spectrum of issues that still requires ongoing research to better understand the pathogenesis, diagnosis and treatment of this infection, which still affects millions of people annually worldwide.

References

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