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HIV/Tuberculosis Co-Infection: Are New Approaches Needed

Dear Sir,

In their experience, Dr. Memon *et al.*¹ found that about 30% of all AIDS patients had active clinical tuberculosis but found no HIV among 70 patients with tuberculosis. Their description of 30% incidence of tuberculosis at presentation or within the first year after AIDS diagnosis is consistent with other national experience² but is somewhat higher than the 7-10% annual tuberculosis incidence described elsewhere.³ This may be due to higher burden of disease in Pakistan⁴ and new infections among HIV/AIDS patients.

That Dr. Memon and colleagues found no HIV among tuberculosis patients is entirely understandable based on current HIV epidemiology in Pakistan. HIV can increase tuberculosis incidence by as much as 4-fold.³ This means that at the current HIV prevalence among the general population of Pakistan of about 0.05%,⁵ one needs to test between 500 and 2000 tuberculosis patients to detect one HIV infection.

Dr. Memon and colleagues are right to conclude that at the current stage of HIV epidemic, HIV testing among tuberculosis is likely to be an inefficient strategy for detecting HIV. However, their findings suggest a case for more aggressive efforts to detect tuberculosis among HIV/AIDS patients. One such approach would be to detect and manage latent tuberculosis. Most adults develop overt tuberculosis from latent infection that they acquired in childhood. Detection and treatment of latent tuberculosis is the standard of care in most developed countries but the World Health Organization recommends against this strategy in developing countries to avoid development of antimicrobial resistance with long-term isoniazid monotherapy. This is reasonable, given the cost of such therapy and low adherence to treatment that we observe here.

With 30% incidence at year one, Pakistan's HIV patients are at significant risk of morbidity or death from tuberculosis. Since about 40% of all Pakistanis have latent tuberculosis,⁴ testing and managing latent

tuberculosis among HIV patients is a good strategy. The risk of isoniazid resistance is mitigated among these patients, many of whom are already receiving daily life-long medicine for which they are monitored and counseled monthly. Furthermore, limited data suggest that about 70-90% fully adhere to their medicines (National AIDS Control Program 2007). This strategy would likely ward off the serious morbidity of full-blown tuberculosis in a significant number of patients with HIV/AIDS. Since there is treatment available to cure such tuberculosis, this testing is ethically justified and warranted.

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Antibiotic Prophylaxis in Clean General Surgery

Dear Sir,

In reference to the article "Antibiotic Prophylaxis in Clean General Surgery" published in your prestigious journal JCPSP 2007, Vol. 17 (8):462-464, following observations are submitted:

1. Although *Staphylococcus aureus*, Coagulase negative Staphylococci and Streptococci are the commonest organisms isolated in clean surgery, the authors have used inj. Ceftazidime, a third generation highly selective for Pseudomonas with poor activity against Gram positive aerobes. The authors have also used inj. Gentamicin in group B as an alternative to ceftazidime which too is not used alone without another antistaphylococcal antibiotic like