

Profile of Tuberculosis Infection among Current HIV+ Patients at the Philippine General Hospital

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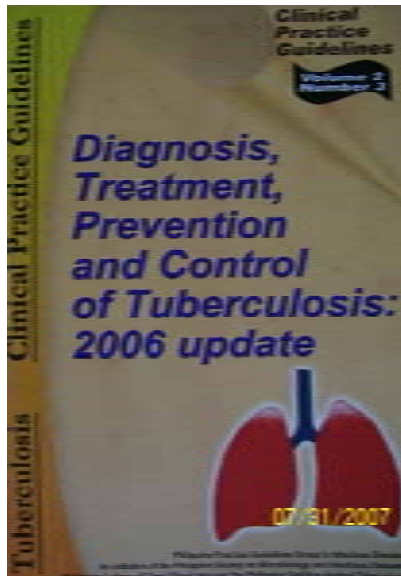
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TB in the Philippines

- 6th leading cause of morbidity and mortality
- 9th among 22 high burden countries



CPG Diagnosis, Treatment, Prevention and Control of TB 2006 Philippine Update





WHO Global Report 2004

- 2 billion people are infected with TB
- 8.9 million new cases diagnosed





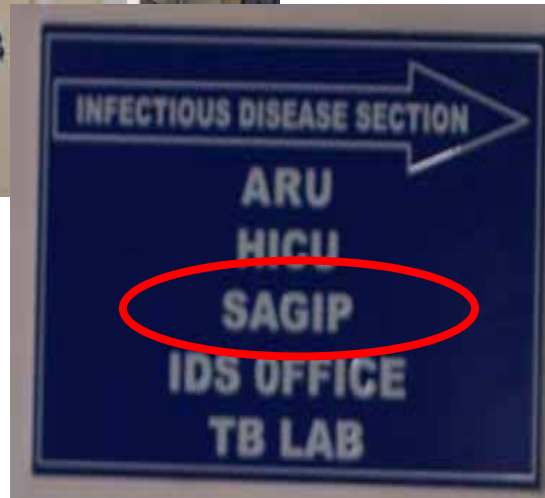
Philippine Data

- HIV infection in adults: 37 M
- Prevalence of HIV in the Philippines <1%





SAGIP Unit



- STD/AIDS Guidance Intervention Prevention Unit
- Facilitated referrals
- Pre and post test counselling for HIV





HIV and TB

- Prevalence of new TB cases among adult HIV Patients ~ 8.3%
- 229,000 HIV deaths from TB

WHO Global Report 2004





- The co-infection exaggerates the effects of the other
- HIV allows the MTB organism to proliferate
 - Progression to clinical disease
 - ~10% per year risk for development of active TB
- Active TB correlated with increased HIV viremia making HIV patients more contagious

Koenig et al. AIDS: immunopathogenesis and immune response to human immunodeficiency virus. From De Vita et. al. AIDS: etiology, diagnosis, treatment and prevention 2nd ed. Philadelphia, Lippincott,





- 40.75% of HIV infected patients have mycobacterial infection
- 34/80 patients had positive AFB Smear

Montoya et al. Clinical, Radiologic and Microbiologic Features of Mycobacterial Infection in Patients with HIV. *Phil J Microb Infect Dis* 1998





- Review of SAGIP Database in 2003 involving 72 HIV/AIDS cases found 10 patients (13%) to have been diagnosed with active tuberculosis

Destura et al. Profile of HIV/ AIDS Patients at the PGH: Revisiting 9 Years of Clinical Experience. Phil J Microbiol Infect Dis 2003





Objectives:

1. To determine the rate of HIV-TB co-infection among current HIV positive patients seen at the Philippine General Hospital.
2. To describe the behavior of tuberculosis among HIV patients seen at the Philippine General Hospital





Methodology

- Retrospective descriptive study
- Review of records of all current patients SAGIP Unit of the PGH.
- HIV positive patients diagnosed to have probable tuberculosis by either imaging study, biopsy of tissue specimen, or AFB smear and TB culture studies were included





- Demographic data were extracted
- History of prior tuberculosis infection
- TB Symptoms, physical examination findings, imaging studies and smear status
- Side effects of TB treatment,
- Simultaneous TB treatment and anti-retroviral use





Results

- 28 HIV positive patients
- 8/28 to have been diagnosed with active mycobacterial infection simultaneous with their HIV positive status.
- One HIV positive patient is still being investigated





Demographics

Males (n= 8)	6		
Co morbidities (n=8)	Previous tuberculosis	Pulmonary	3
		TB Arteritis	1
HIV Diagnosis	ELISA positive	8	
	Western blot	8	
	AIDS defining condition	Pneumocystis carinii pneumonia	
Cryptosporidiosis			1
Esophageal candidiasis			1





HIV and TB

- Pulmonary TB: 6 patients
- TB Lymphadenitis: 1 patient
- One case of NTM





Pulmonary TB among the HIV Patients

- 21% of current HIV patients had active PTB
 - Other studies showed PTB is the most common presentation
- Three patients presented with symptoms of PTB at time of diagnosis
- Most common symptom is chronic cough followed by fever and weight loss
- Half of the patients had normal PE





Diagnosis of PTB

- Chest Radiography (non-specific)
 - Reticular infiltrates 67%
 - Lung nodules 50%
 - Cystic opacity 16%
 - Pleural plaques 16%
- AFB Status
 - Positive in 3 patients





Influence of Previous PTB treatment

- 2 patients with previous PTB
- One patient had resistance to INH underwent treatment with addition of streptomycin





Extrapulmonary TB

- Previous TB arteritis
- Developed TB lymphadenitis
- Sensitive to HRZE





Non-tuberculous mycobacteria

- Chronic cough, fever, reticulonodular infiltrates on CXR
- *Mycobacterium terrae* complex on sputum TB culture
- Treatment with ethambutol, clarithromycin and cotrimoxazole,
- Developed of drug induced hepatitis.





Anti-TB Meds with Anti-Retrovirals

- 6 patients able to take anti-retrovirals
- No side effects noted





Conclusion

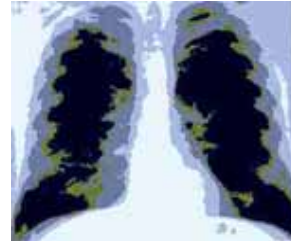
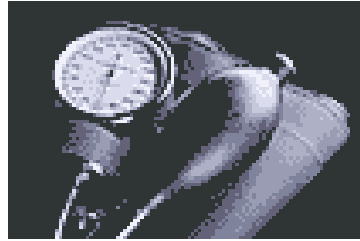
- TB and HIV co-infection among current patients of the SAGIP Unit is 21%.
- Pulmonary involvement is the most form of TB infection among HIV patients
- A chronic cough is the most common symptom





- There are no radiographic findings highly suggestive of PTB in our patients
- The possibility of NTM should be considered and TB culture should be requested
- There were no noted side effects of treatment





Thank you!!!

