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Primary INH prophylaxis against tuberculosis in HIV exposed patients

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Abstract: *AIDS is a disease affecting multiple organs and producing different opportunistic infections and malignancy. HIV is transmitted through homosexual contact, heterosexual contact, blood and blood products and transplacentally from infected mother to infant. Tuberculosis is one of the commonest opportunistic infection*
Aim of the study: *Thestudy highlights the importance of INH prophylaxis in PPD >5mm positive patients for a better outcome.*
Patient and methods: *100 patients in Govt. Medical College, Kozhikode in the Infectious Disease unit under General Medicine was studied retrospectively from January 2015 to June 2016.*
Conclusion: *The prognosis improved with early intervention.*
Key words: *Western blot, PPD skin test, HIV RNA, c-ART*

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I. Introduction

1. AIDS was considered a killer disease previously. With the introduction of early diagnosis and prophylaxis for various infections the prognosis has improved.
2. Infections in AIDS depending on CD4 count AIDS patients are prone for various infections. CD4 count >200 bartonella infection, CD4 <200 infections like pneumocystis, jiroveci, coccidiodes, immitis. CD4 count >100 varicella zoster infection, Cryptococcus neoformans, histoplasmacapsulatum, cytomegalovirus. CD4 count <50 mycobacterium tuberculosis, mycobacterium avium complex, toxoplasma gondii infection.

3. Patients and methods

Prospective study in Department of General Medicine, Govt. Medical College, Kozhikode, from January 2015 to June 2016. 100 patients of AIDS was included in the study. Routine investigation included blood counts, renal function tests, liver function tests, ECG, chest X-ray, random blood sugar and lipid profile. Other tests included PPD skin test, sputum AFB, PCR, antitoxoplasma antibody, HbsAg, HCV RNA, mini mental status examination. Other specific tests included western blot, HIV RNA viral load, CD4 cell count, other tests done depending on the necessity.

4. Exclusion criteria

Patients in the age group 30-60 years were included and others were excluded.

5. Statistical analysis

Male : Female ratio 10:1
Peak incidence 3rd decade

Table 1: Initial presentation

Clinical features	No.of patients
Fever	63
Constitutional symptoms	84
Lymphadenopathy	70
Ophthalmic infections	48
Gastrointestinal	55
Lung	62
Neurological	48
Skin	4
Cardiovascular	25
Hepatobiliary	22
Endocrine	28
Renal	2

Table 2: Opportunistic infections in a child

Mucocutaneous herpes simplex	7
Mycobacterium tuberculosis	28
Oral candidiasis	41
Varicella zoster infection	6
Cryptococcus neoformans	1
Salmonella infection	7
Gastroenteritis	12
Cytomegalovirus infection	2

Table 3: Diagnosis of HIV

Western blot

Table 4: Laboratory monitoring of HIV infection

CD4 T cell count (flow cytometry) (best indicator of immunologic competence)	Repeat 3-6 months
HIV RNA by PCR or RT-PCR assay Influenced by the state of activation of immune system and fluctuates if there is secondary infection.	Repeat 3-6 months

Table 5: Prophylaxis

INH prophylaxis was given for 24 patients, PPD skin test positive >5mm patients with isoniazid 300mg + pyridoxine 25mg for 9 months and the patient was monitored for 1 ½ years.

II. Results Of The Study

30-40% of HIV patients developed pulmonary tuberculosis. 20-30% had extrapulmonary tuberculosis.PPD skin test was a valuable tool to segregate the patients who required prophylaxis Early prophylaxis improved the life span.

III. Discussion

Commonest opportunistic infection in HIV patient is respiratory (pneumocysticcarinii and mycobacterium tuberculosis). Prophylaxis with trimethoprim sulphamethoxazole has reduced the infections like pneumocystis and toxoplasma and oral azole prophylaxis decreased the incidence of Cryptococcus. PPD skin test had a very major role in preventing tuberculosis.

IV. Conclusion

The followup of patients for 1 ½ years showed the incidence of tuberculosis in patients who received prophylaxis was reduced by 70% in PPD skin test positive patients.

References

Books

[1]. Harrisons Principle of Internal Medicine. 19thEdn.

Journal papers

[2]. AIDS. Official AIDS Society Journal

[3]. JAMA Internal Medicine, 2013

[4]. New England Journal of Medicine. July 7, 2011. Primary INH prophylaxis in HIV exposed.

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