

Comparing Prevalence of Relapse Pulmonary Tuberculosis in Two Different Regime of Antitubercular Treatment

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ABSTRACT

Background:

Tuberculosis continues to be major health problem in India. In India, under the Revised National Tuberculosis Control Program (RNTCP), the percentage of smear-positive re-treatment cases out of all smear-positive cases is 24%. The Revised National Tuberculosis Programme (RNTCP), was launched in 1997 needs continuous evaluation. India alone accounts for approximately 1/5th of total global tuberculosis incidence. Every year 1.8 million new cases occur in India of which 0.8 million are infectious.

Aims:

Compare Prevalence of relapse tuberculosis in two different regimen of Anti-tubercular treatment.

Materials and Methods:

Its Prospective observational study .we have conducted study on 39 patients diagnosed to have relapse pulmonary tuberculosis on sputum and chest x-ray basis in Respiratory Medicine Department of Dhiraj Hospital, Vadodara. We have asked detailed past history regarding Anti-tubercular treatment and divided the two groups government and private all declared cure in the past. We evaluated the treatment outcomes between two groups.

Results:

Among 39 relapse patients in the study, 26 patients (66.66%) were having relapse treated under DOTS regime RNTCP and 13 patients (33.33%) who were treated under Private Anti-tubercular. In both the groups male were having more relapse rate. In overall analysis age of >30 are having more relapse occurrence as compared to other age group peoples.

Conclusion: Relapse rate is high among the patient when treated with DOTS as compared to private anti tubercular treatment.. In majority of the patients relapse was noticed after 3-4 yrs of initial treated with DOTS and 6-7 years in private treatment.

Keywords: Relapse, Anti- tubercular, cured, RNTCP

INTRODUCTION:

Tuberculosis remains a major public health problem in India and other developing countries. In India, more than 40% population is infected with TB bacilli. The greatest burden of disease and mortality is in adult aged 15 to 60 years, most of whom are productive members of the society. Sputum smear positive patients are of major concern as far as public health is concerned and tuberculosis control program primarily targets these patients. One sputum positive patient could infect 10-15 persons in his life time leading to spread of infection in the community.

The main goals of tuberculosis treatment are to cure the individual with the disease and minimize the transmission of mycobacterium tuberculosis to others in the community. Although very good and potent anti-TB drugs are available but their indiscriminate use and non-adherence have resulted in lesser cure rates, high mortality and emergence of drug resistance strains. Treatment of tuberculosis is challenging both for the patients and the providers because it requires taking multiple medications for a minimum of six months.

According to CDC 2013 report in 2013, 9 million people around the world became sick with TB disease. There were around 1.5 million TB-related deaths worldwide ^[1]. The Re-treatment notification rate has almost doubled from 4 per 100,000 population in 1999 to 8 per 100,000 population by the year 2008 and continues to at that level in 2013. ^[2]

MATERIAL AND METHODS:

This is a Retro-prospective observational cross sectional study carried out in Department of respiratory medicine, Sumandeep Vidyapeeth University for duration of 3 months in which total number of patients included were 39 and were

evaluated on the basis of history and examination. All Patients visiting to Respiratory Medicine OPD were asked about the detail history regarding past Anti-tubercular treatment and were divided in intermittent and daily Anti-tubercular therapy

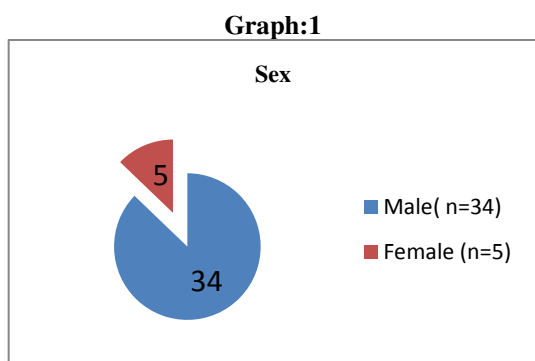
INCLUSION CRITERIA:

1. Patient with past history of anti-tubercular treatment.
2. Age group >18 years
3. Patients willing to give consent.

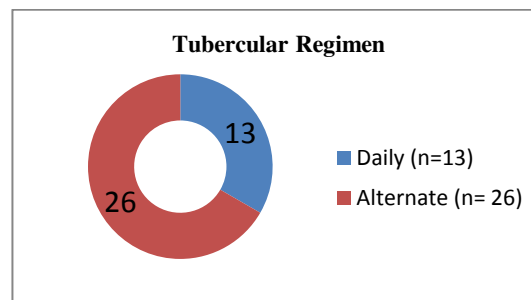
EXCLUSION CRITERIA:

1. Defaulter patients.
2. Patients with co-morbid conditions (DM, HTN etc.)
3. Drug resistant patients.
4. Patients not willing to give consent.

RESULTS:

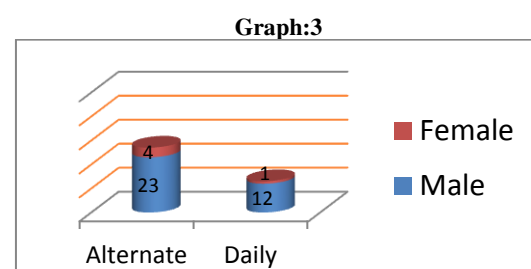


According to sex ratio male were having more relapse rate as compared to the females in the study.

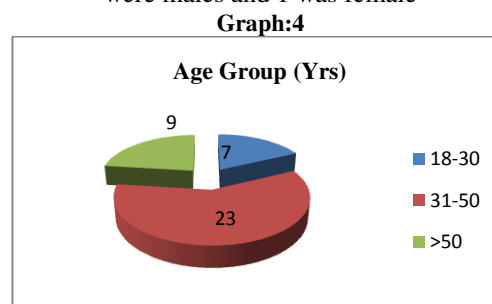


Graph:2

Among all chosen patients in the study 13 patients were taking daily regimen Anti-tubercular treatment and 26 were taking alternate day regimen.



Patients consuming alternate day therapy, 23 were male and 4 female, and among daily regimen 12 were males and 1 was female



Among selected 39 patients 7 patients were between age group 18-30, 23 were between age group of 31-50 yrs and 9 were more than 50 yrs.

DISCUSSION:

S.NO	STUDY	PATIENTS	CONCLUSION
1.	Zierski.et al [3] (PARIS)	290	There is no significant difference in relapse rate in both regimen
2.	Our study	39A	Relapse is more in intermittent therapy
3.	Mwandumba HC et.al [4] (LIVERPOOL,UK)	399	Relapse rate is higher in intermittent therapy as compared to daily treatment

CONCLUSION:

1. Relapse rate is high among the patient when treated with intermittent day therapy as compared to daily Anti-tubercular therapy.
2. Male predominance is present in each group.
3. Age group 31-50 yrs had more relapse rate.
4. In majority of the patients relapse was noticed after 3-4 yrs of initial treatment with alternate therapy and 6-7 years in daily therapy.

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