

TITLE OF THE ABSTRACT

UNDERNUTRITION AND TUBERCULIN REACTIVITY IN SPUTUM
POSITIVE TUBERCULOSIS AT PRESENTATION AND IN RESPONSE
TO TREATMENT

Keywords: Tuberculin Reactivity, Undernutrition, Pulmonary Tuberculosis

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OBJECTIVES

This prospective observational cohort study was designed to gauge the relationship between tuberculin reactivity and undernutrition in patients newly diagnosed with sputum positive pulmonary tuberculosis, the rate of tuberculin conversion in tuberculin negative patients on treatment, weight gain in underweight patients, and to correlate weight gain, tuberculin conversion and improvement in quality of life.

METHODS

This was a prospective study designed to include individuals with newly diagnosed sputum positive pulmonary Tuberculosis. Anthropometric measurements and nutritional assessment was followed by intradermal

administration of 0.1ml of 5TU strength of PPD (Purified Protein Derivative). This will be read at 48 hours and the strength of reaction will be documented. Patients were followed up at 2 months and 6 months. PPD was re-administered at 6 months. Subgroup analysis and comparison of the cohort was done following completion of the six month follow up period.

RESULTS AND CONCLUSION

58 patients out of 134 were found to be anergic at baseline, which was significantly associated with chronic energy deficiency (RR – 1.96). Most patients had significant weight gain, increase in PPD reactivity and improvement in health related quality of life at 6 months. A small subset of patients had persistent anergy(n=6). Persistent anergy was also associated with inability to gain weight (RR – 9.14). The overall results support an inter-relationship between undernutrition, CMI, and quality of life at baseline and on therapy. Undernutrition with poor CMI is associated with an increased risk of death. Patients who fail to improve their nutrition on treatment also fail to improve their CMI.