ABSTRAK

Tuberkulosis (TB) merupakan penyakit infeks kronis yang dapat menyebabkan kerusakan paru-paru permanen (sekule). Diabetes Melitus (DM) merukan komorbiditas yang dapat memperburuk penyembuhan TB. Evaluasi sekuele melalui pendekatan berbagai pemeriksaan seperti: HRCT, MMP-9, TCM, HbA1c dan Kualitas hidup pasien dilakukan untuk memahami hubungan antara derajat kerusakan paru dan faktor klinis terkait. Penelitian observasional analitik dengan pendekatan cross sectional dilakukan pada pasien TB yang sudah dinyatakan sembuh (setelah pengobatan 6 bulan) dan penilaian kualitas hidup menggunakan instrumen WHOQOL-BREF. Analisis korelasi dilakukan untuk menentukan hubungan antara parameter tersebut dengan derajat sekuele paru yang dinilai secara radiologis. Hasil: Gambaran HRCT yang bermakna terbanyak adalah fibrosis TB-DM: 26 (86,7%), TB tanpa DM: 10 (33,3%) , *p*: 0,00, lalu diikuti opasitas TB-DM: 21 (70,0%), TB tanpa DM: 11 (36.7%), *p*: 0,01. Sedangkan kavitas hanya didapatkan TB-DM: 12 (40,0%), TB tanpa DM: 8 (26.7%), *p*: 0,02. MMP-9 pada penderita TB-DM: 171,33 ± 50,49 TB tanpa DM: 63,90 ± 37,98, *p:* 0,00. TCM pada penderita TB-DM: 30 (100%), TB tanpa DM: 17 (56,7%). HbA1c pada penderita TB-DM: 7,12 ± 0,94 TB tanpa DM: 4,19 ± 0,71, *p:* 0,00. Kualitas hidup (WHOQOL-BREF): Fisik penderita TB-DM: 48,30± 5,79, TB tanpa DM: 81,50 ± 6,15, *p:* 0,00. Psikologis penderita TB-DM: 45,15 ± 4,95 TB tanpa DM: 80,90 ± 4,48, *p:* 0,00. Sosial penderita TB-DM: 45,63 ± 5,29, TB tanpa DM: 79,60 ± 5,90, *p:* 0,00. Lingkungan penderita TB-DM: 44,83 ± 4,78 TB tanpa DM: 81,50 ± 6,37, *p:* 0,00. Skor Kualitas Hidup penderita TB-DM: 183,90 ± 11,94 TB tanpa DM: 317,83 ± 25,758, *p:* 0,00. Kombinasi HRCT, MMP-9, TCM, dan HbA1c, dapat digunakan sebagai indikator prognostik untuk menilai derajat sekuele pada pasien TB-DM. Diagnostik dini yang tepat dapat meningkatkan kualitas hidup dan mengurangi komplikasi jangka panjang.

Kata kunci: Tuberkulosis, Diabetes Melitus, HRCT, MMP-9, HbA1c, TCM, Sekule, Kualitas hidup.

ABSTRACT

Tuberculosis (TB) is a chronic infectious disease that can cause permanent lung damage (sequelae). Diabetes Mellitus (DM) is a comorbidity that can worsen TB healing. Evaluation of sequelae through various examination approaches such as: HRCT, MMP-9, TCM, HbA1c and patient quality of life was carried out to understand the relationship between the degree of lung damage and related clinical factors. An analytical observational study with a cross-sectional approach was conducted on TB patients who had been declared cured (after 6 months of treatment) and quality of life assessment using the WHOQOL-BREF instrument. Correlation analysis was performed to determine the relationship between these parameters and the degree of lung sequelae assessed radiologically. Results: The most significant HRCT images were fibrosis in TB-DM: 26 (86.7%), TB without DM: 10 (33.3%), p: 0.00, then followed by opacity in TB-DM: 21 (70.0%), TB without DM: 11 (36.7%), p: 0.01. While cavities were only found in TB-DM: 12 (40.0%), TB without DM: 8 (26.7%), p: 0.02. MMP-9 in TB-DM patients: 171.33 ± 50.49 TB without DM: 63.90 ± 37.98, p: 0.00. TCM in TB-DM patients: 30 (100%), TB without DM: 17 (56.7%). HbA1c in TB-DM patients: 7.12 ± 0.94 TB without DM: 4.19 ± 0.71, p: 0.00. Quality of life (WHOQOL-BREF): Physical TB-DM patients: 48.30 ± 5.79, TB without DM: 81.50 ± 6.15, p: 0.00. Psychological of TB-DM patients: 45.15 ± 4.95 TB without DM: 80.90 ± 4.48, p: 0.00. Social of TB-DM patients: 45.63 ± 5.29, TB without DM: 79.60 ± 5.90, p: 0.00. Environment of TB-DM patients: 44.83 ± 4.78 TB without DM: 81.50 ± 6.37, p: 0.00. Quality of Life score of TB-DM patients: 183.90 ± 11.94 TB without DM: 317.83 ± 25.758, p: 0.00. The combination of HRCT, MMP-9, TCM, and HbA1c, can be used as a prognostic indicator to assess the degree of sequelae in TB-DM patients. Early and proper diagnosis can improve quality of life and reduce long-term complications.

***Keywords**: Tuberculosis, Diabetes Melitus, HRCT, MMP-9, TCM, Sequelae, Quality of life.*