Korelasi Gambaran Radiologi Foto Toraks dan Hasil Tes Cepat Molekular pada Pasien TB Paru = Correlation between Chest Radiology and Molecular Rapid Test in Pulmonary Tuberculosis Patients

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Abstrak

Latar belakang: Infeksi tuberkulosis (TB) adalah masalah kesehatan yang sudah lama menjadi beban dunia, terutama di Indonesia. Metode diagnosis dengan GeneXpert MTB/RIF merupakan metode diagnosis dengan banyak kelebihan, termasuk lebih efektif dan efisien dibandingkan metode kultur Lowenstein-Jensen sebagai gold standard. WHO menyarankan penggunaan TCM GeneXpert dan foto toraks sebagai upaya triase pasien suspek TB. Penelitian menunjukan bahwa penggabungan kedua metode ini memiliki positive predictive value yang besar. Meskipun demikian, penelitian tentang TCM TB dan kaitannya dengan hasil pemeriksaan foto toraks masih sangat terbatas.

Metode: Penelitian ini merupakan penelitian deskriptif analitik berdesain potong lintang dengan jumlah sampel minimal 68 subjek. Data pada penelitian ini merupakan data sekunder dari penelitian dengan judul “A prospective longitudinal study of chronic pulmonary aspergillosis in pulmonary tuberculosis in Indonesia (APICAL)” yang telah dilaksanakan sebelumnya dan kemudian diseleksi berdasarkan kriteria inklusi dan eksklusi.

Hasil: Dari 69 subjek yang diikutsertakan dalam penelitian, sebanyak 42 (60,78%) subjek memiliki hasil TCM negatif. Temuan foto toraks yang terbanyak ditemukan adalah infiltrat (86,96%), diikuti kavitas (56,25%), fibrosis parakaviter (37,68%), penebalan pleura (34,78%), nodul (14,49%), dan bronkiektasis (10,14%). Antara temuan foto toraks dan hasil TCM, ditemukan hubungan yang bermakna antara hasil TCM dengan kavitas, fibrosis parakaviter, penebalan pleura, dan nodul.

Kesimpulan: Terdapat hubungan yang bermakna antara hasil TCM dengan beberapa temuan foto toraks pada pasien TB, yakni kavitas, fibrosis parakaviter, penebalan pleura, dan nodul.
.....Background: Tuberculosis (TB) infection is a health problem that has long been a burden on the world, especially in Indonesia. The GeneXpert MTB/RIF diagnostic method is a diagnostic method with many advantages, including being more effective and efficient than the Lowenstein-Jensen culture method as the gold standard. WHO recommends the use of GeneXpert molecular test and chest X-ray as an effort to triage patients with suspected TB. Research shows that the combination of these two methods has a large positive predictive value. However, research on GeneXpert molecular rapid test and its relation to chest X-ray results is still very limited.

Methods: This research is a cross-sectional analytical descriptive study with a minimum sample size of 68 subjects. The data in this study are secondary data from a study entitled " A prospective longitudinal study of chronic pulmonary aspergillosis in pulmonary tuberculosis in Indonesia (APICAL)" and then selected based on inclusion and exclusion criteria.

Results: Of the 69 subjects included in the study, 42 (60.78%) subjects had negative molecular rapid test results. The most common chest X-ray findings were infiltrates (86.96%), followed by cavities (56.25%), paracavitary fibrosis (37.68%), pleural thickening (34.78%), nodules (14.49%), and bronchiectasis (10.14%). Between chest X-ray findings and molecular rapid test results, a significant relationship was found between molecular rapid test results with cavities, paracavitary fibrosis, pleural thickening, and nodules.

Conclusion: There is a significant relationship between molecular rapid test results and several chest X-ray findings in TB patients, namely cavities, paracavitary fibrosis, pleural thickening, and nodules.