

Distribusi spesies jamur yang diisolasi dari penderita kanker paru dan kerentanannya terhadap Itrakonazol di RS Persahabatan pada tahun 2019- 2020. = Species distribution of fungal isolated from lung cancer patients and its susceptibility to Itraconazole in Persahabatan Hospital in 2019-2020

Marshal Achmad Wachdin, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20511322&lokasi=lokal>

Abstrak

Pendahuluan: Pasien kanker paru di seluruh dunia meningkat, demikian pula dengan infeksi oportunistiknya, mikosis paru. Meskipun mikosis paru sudah lama dikenal, namun penelitian yang tepat tentang prevalensi dan insidensinya masih terbatas di Indonesia. Informasi tentang kerentanan itrakonazol sebagai obat oral yang dapat digunakan untuk mengobati mikosis paru juga diperlukan. Tujuan penelitian ini adalah untuk mengetahui profil jamur dan kerentanannya terhadap itrakonazol pada penderita kanker paru.

Metode: Desain penelitian deskriptif cross-sectional. Subjek dalam penelitian ini adalah pasien kanker paru yang dirawat di RS Persahabatan dari Januari sampai Mei 2020, dan sputumnya dilakukan pemeriksaan di Laboratorium Mikologi Departemen Parasitologi Universitas Indonesia. Pasien berusia sama atau lebih dari 18 tahun, belum menjalani kemoterapi, dan diperiksa dengan bronkoskopi. Uji kepekaan jamur dilakukan dengan difusi cakram pada agar M^Aller Hinton. Itraconazole (8 ¼g) digunakan dan Amphotericin B (20 ¼g) dan Fluconazole (25 ¼g) sebagai kontrol positif.

Hasil: Tujuh puluh tujuh pasien didapatkan. Kanker yang paling banyak dijumpai adalah adenokarsinoma pada 58 penderita, sisanya adalah karsinoma sel skuamos. Jenis jamur yang ditemukan adalah Aspergillus niger (22,1%), Aspergillus flavus (15%), Aspergillus fumigatus (14,3%), Candida albicans (40%), Candida glabrata (5%), Candida parapsilosis (2,1%), Candida krusei (0,7%), dan Candida tropicalis (0,7%).

Sebagian besar spesies masih sensitif terhadap itrakonazol dan amfoterisin B.

Kesimpulan: Jenis jamur yang paling banyak ditemukan adalah Candida albicans. Aspergillus spp dan Candida spp dan mayoritas sensitif terhadap Itraconazole.

Kata kunci: Kanker paru-paru, Mikosis Paru, Kolonisasi jamur, Candida spp, Aspergillus spp, sputum
<hr /><i>Introduction: Lung cancer patients around the globe are increasing along with its opportunistic infection, pulmonary mycosis. Despite pulmonary mycosis being wellknown, a proper research about the prevalence and incidence are limited in Indonesia. An update about the susceptibility of itraconazole as the most common drug used to treat pulmonary mycosis is also needed. The aim of this study was to determine the fungal profile and its susceptibility to itraconazole in lung cancer patients.

Methods: This is a descriptive cross-sectional study using both secondary and primary data. Lung cancer patients who had been admitted to Persahabatan Hospital from January to May 2020 were tested for mycological examinations by Mycology Laboratory of the Department of Parasitology, University of Indonesia. Patients aged equal or more than 18 years old, had not undergone chemotherapy, and examined with bronchoscopy were included. The fungi susceptibility test were conducted using disk diffusion on M^Aller Hinton agar. Itraconazole (8 ¼g) were used and Amphotericin B (20 ¼g) and Fluconazole (25 ¼g) were also measured as a positive control.

Results: Seventy-seven patients were involved. The most common cancer was adenocarcinoma in 58

subjects, the rest were squamos cell carcinoma. The fungal species found were Aspergillus niger (22.1%), Aspergillus flavus (15%), Aspergillus fumigatus (14.3%), Candida albicans (40%), Candida glabrata (5%), Candida parapsilosis (2.1%), Candida krusei (0.7%), and Candida tropicalis (0.7%). Most of the species were still sensitive to itraconazole and amphotericin B.

Conclusion: The most common fungal species was Candida albicans. Aspergillus spp and Candida spp were sensitive to Itraconazole.

Key words: Lung cancer, Lung Mycosis, Fungal Colonization, Candida spp, Aspergillus spp, sputum</i>