Tesis

PERBEDAAN KARAKTERISTIK DASAR, TATALAKSANA DAN MORTALITAS PASIEN ANAK DENGAN EFUSI PLEURA SEBELUM DAN SAAT PANDEMI COVID 19 DARI TAHUN 2018-2022 DI RSUP DR. M. DJAMIL PADANG

Oleh :

dr. Dya Mulya Lestari

No BP 1750304208

Pembimbing I :

Dr. dr. Finny Fitry Yani, Sp. A (K)

Pembimbing II :

Dr. dr. Rinang Mariko, Sp. A (K)

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ABSTRAK

PERBEDAAN KARAKTERISTIK DASAR, TATALAKSANA DAN MORTALITAS PASIEN ANAK DENGAN EFUSI PLEURA SEBELUM DAN SAAT PANDEMI COVID-19 DARI TAHUN 2018-2022 DI RSUP DR. M DJAMIL PADANG

Dya Mulya Lestari, Finny Fitry Yani, Rinang Mariko, Hafni Bachtiar,
Iskandar Syarif, Mayetti, Rusdi
Bagian Ilmu Kesehatan Anak Fakultas Kedokteran Universitas Andalas
RSUP Dr. M. Djamil Padang

Latar Belakang : Efusi pleura merupakan kondisi terjadinya akumulasi cairan antara pleura parietal dan pleura viseral. Efusi pleura akan dipengaruhi oleh karakteristik klinis dan tatalaksananya. Masa pandemi Covid-19 menjadi salah satu faktor risiko yang dapat mempengaruhi mortalitas dari pasien anak dengan efusi pleura di RSUP Dr. M. Djamil Padang.
Tujuan : Mengetahui perbedaan karakteristik dasar (demografi, klinis dan etiologi), tatalaksana dan mortalitas sebelum dan saat pandemi Covid-19 pada pasien anak dengan efusi pleura di RSUP Dr. M. Djamil.
Metode : Penelitian ini cross-sectional melalui pengambilan data pasien anak dengan efusi pleura di RSUP Dr. M. Djamil dari Februari 2018 sampai Maret 2022. Data yang lengkap terkumpul sejumlah 71 data, yang terbagi 30 pasien sebelum pandemi dan 30 pasien saat pandemi Covid-19.
Hasil : Pasien anak dengan efusi pleura didapatkan dari karakteristik demografi lebih banyak laki-laki dan berusia 12-18 tahun pendidikan orangtua yang tinggi dan berasal dari provinsi Sumatera Barat pada masa sebelum dan saat pandemi Covid-19. Status gizi tidak didapatkan perbandingan sebelum dan saat pandemi Covid-19 hampir sama banyak gizi baik dengan malnutrisi. Pada karakteristik klinis didapatkan hasil yang bermakna yaitu lama keluhan sebelum masuk rumah sakit, dimana sebelum pandemi Covid-19 pasien anak dengan efusi pleura cenderung mempunyai keluhan >4 minggu lebih tinggi dibandingkan saat pandemi Covid-19 yaitu 23,3% vs 3,3% ($p<0,05$). Perbedaan bermakna juga terjadi pada analisis cairan pleura, dimana kadar LDH pada pasien efusi pleura saat pandemi Covid-19 lebih tinggi dibandingkan sebelum pandemi Covid-19 ($p<0,05$) yaitu 5.277 ± 10.664 vs 632 ± 1.069. Namun pada keluhan utama, dan analisis cairan pleura lainnya beserta etiologi jenis kuman cairan efusi pleura didapatkan hasil tidak bermakna ($p>0,05$).

Berdasarkan penggunaan antibiotik pada pasien anak dengan efusi pleura, terdapat beberapa jenis antibiotik yang paling banyak digunakan sebelum dan saat pandemi Covid-19 yaitu antibiotik lini pertama seperti Ampicillin (63,3% vs 46,7%) dan Gentamicin (50,0% vs 33,3%), dan jenis antibiotik yang jarang digunakan pada sebelum dan saat pandemi Covid-19 yaitu jenis antibiotik lini ketiga seperti Meropenem, Cefepime, Cefoperazone, Ceftazidime, Amikasin, Vankomicin dan Fosfomycin. Angka mortalitas pada pasien anak dengan efusi pleura cukup tinggi, yaitu >30%. Prevalensi lebih tinggi pada saat pandemi Covid-19 (36,7%) dibandingkan sebelum pandemi Covid-19 (33,3%), namun secara statistik tidak bermakna (p>0,05).

Kesimpulan : Perbedaan karakteristik dasar, tatalaksana, dan mortalitas pasien anak dengan efusi pleura tidak dipengaruhi pada masa sebelum dan saat pandemi Covid-19. Hasil signifikan didapatkan dari lama keluhan sebelum masuk rumah sakit sebelum pandemi Covid-19 lebih banyak >4 minggu dibandingkan saat pandemi Covid-19 dan kadar LDH pada cairan efusi pleura yang meningkat saat pandemi Covid-19 dibandingkan sebelum pandemi Covid-19.

Kata kunci : Pleural effusion in pediatric, Pleural effusion in Covid-19, Mortality pleural effusion in pandemic Covid-19

ABSTRACT

THE DIFFERENCES IN BASIC CHARACTERISTICS, MANAGEMENT AND MORTALITY PEDIATRIC PATIENTS WITH PLEURAL EFFUSION BEFORE AND DURING THE PANDEMIC COVID-19 FROM 2018-2022 AT DR. M DJAMIL PADANG

Dya Mulya Lestari, Finny Fitry Yani, Rinang Mariko, Hafni Bachtiar,
Iskandar Syarif, Mayetti, Rusdi
Department Of Child Health, Faculty Of Medicine, Universitas Andalas
RSUP Dr. M. Djamil Padang

Background : Pleural effusion is a condition where fluid accumulates between the parietal pleura and visceral pleura. Pleural effusion will be influenced by clinical characteristics and management. The Covid-19 pandemic is one of the risk factors that can influence the mortality of pediatric patients with pleural effusion at RSUP Dr. M. Djamil Padang.

Objective : To perceive the differences in basic characteristics (demographics, clinical and etiology), management and mortality before and during the Covid-19 pandemic in pediatric patients with pleural effusion at RSUP Dr. M. Djamil.

Method : This research was cross-sectional by collecting data on pediatric patients with pleural effusion at RSUP Dr. M. Djamil from February 2018 to March 2022. Complete data was collected for 71 data, divided into 30 patients before the pandemic and 30 patients during the Covid-19 pandemic.

Results : The demographic characteristics of pediatric patients with pleural effusion were predominantly male and aged 12-18 years with high parental education and came from West Sumatra province before and during the Covid-19 pandemic. There is no comparison between nutritional status before and during the Covid-19 pandemic, almost as much good nutrition as malnutrition. In terms of clinical characteristics, significant results were obtained, namely the length of complaint before admission to hospital, where before the Covid-19 pandemic, pediatric patients with pleural effusion tended to have complaints >4 weeks higher than during the Covid-19 pandemic, namely 23.3% vs 3.3% ($p<0.05$). Significant differences also occurred in pleural fluid analysis, where LDH levels in pleural effusion patients during the Covid-19 pandemic were

higher than before the Covid-19 pandemic ($p<0.05$), namely 5,277+10,664 vs 632+1,069. However, the main complaint and analysis of other pleural fluid along with the etiology of the type of pleural effusion fluid were found to be insignificant ($p>0.05$). Based on the use of antibiotics in pediatric patients with pleural effusion, there are several types of antibiotics that were most widely used before and during the Covid-19 pandemic, namely first-line antibiotics such as Ampicillin (63.3% vs. 46.7%) and Gentamicin (50.0% vs. 33.3%), and types of antibiotics that were rarely used before and during the Covid-19 pandemic were third-line antibiotics such as Meropenem, Cefepime, Cefoperazone, Ceftazidime, Amikacin, Vankomycin and Fosfomycin. The mortality rate in pediatric patients with pleural effusion is quite high, namely >30%. The prevalence was higher during the Covid-19 pandemic (36.7%) than before the Covid-19 pandemic (33.3%), but this was not statistically significant ($p>0.05$).

Conclusion : Differences in basic characteristics, management and mortality did not affect pediatric patients with pleural effusion before and during the Covid-19 pandemic. Significant results were obtained from the length of complaints before admission to hospital before the Covid- 19 pandemic which was >4 weeks more than during the Covid-19 pandemic and LDH levels in pleural effusion fluid which increased during the Covid-19 pandemic compared to before the Covid-19 pandemic.

Key words : *Pleural effusion in pediatric, Pleural effusion in Covid-19, Mortality pleural effusion in pandemic Covid-19*