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**Pengaruh Pedoman Tatalaksana COG dan SIOP terhadap Kesintasan pada Pasien Wilms Tumor di RSUP DR Sardjito**
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# INITSARI

**Latar Belakang:** Tumor Wilms merupakan keganasan ginjal tersering pada anak. Dua pedoman tatalaksana yang digunakan secara luas adalah Children's Oncology Group (COG) dan International Society of Pediatric Oncology (SIOP), namun perbandingan kesintasan keduanya di Indonesia masih terbatas.

**Tujuan:** Menganalisis pengaruh protokol COG dan SIOP terhadap overall survival (OS) dan event-free survival (EFS) pasien tumor Wilms di RSUP Dr. Sardjito.

**Metode:** Penelitian kohort retrospektif dilakukan pada 41 pasien tumor Wilms periode 2015–2025, terdiri atas 23 pasien kelompok COG dan 18 pasien kelompok SIOP. Analisis kesintasan menggunakan metode Kaplan-Meier dan uji log-rank, sedangkan faktor prognostik dianalisis dengan regresi Cox.

**Hasil:** Tidak terdapat perbedaan bermakna antara protokol COG dan SIOP terhadap OS (p=0,695) maupun EFS (p=0,411). Angka OS dua tahun pada kelompok SIOP dan COG masing-masing sebesar 61,8% dan 58,3%, sedangkan EFS dua tahun sebesar 43,1% dan 61,1%. Stadium tumor merupakan faktor prognostik independen yang berpengaruh signifikan terhadap kesintasan.

**Kesimpulan:** Protokol COG dan SIOP memberikan luaran kesintasan yang sebanding pada pasien tumor Wilms. Stadium penyakit merupakan faktor utama yang memengaruhi kesintasan pasien.

**Kata kunci:** Tumor Wilms, COG, SIOP, overall survival, event-free survival

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# ABSTRACT

**Background:** Wilms tumor is the most common pediatric renal malignancy. Two widely used treatment protocols are the Children's Oncology Group (COG) and the International Society of Pediatric Oncology (SIOP), but data comparing their survival outcomes in Indonesia remain limited.

**Objective:** To evaluate the impact of COG and SIOP treatment protocols on overall survival (OS) and event-free survival (EFS) among patients with Wilms tumor at Dr. Sardjito General Hospital.

**Methods:** A retrospective cohort study was conducted involving 41 patients with Wilms tumor treated between 2015 and 2025, including 23 patients in the COG group and 18 patients in the SIOP group. Survival analysis was performed using the Kaplan–Meier method and log-rank test, while prognostic factors were assessed using Cox regression analysis.

**Results:** No significant differences were found between the COG and SIOP protocols regarding OS ($p=0.695$) or EFS ($p=0.411$). The 2-year OS rates were 61.8% and 58.3% for the SIOP and COG groups, respectively, while the 2-year EFS rates were 43.1% and 61.1%. Tumor stage was identified as an independent prognostic factor significantly associated with survival.

**Conclusion:** The COG and SIOP protocols demonstrated comparable survival outcomes in patients with Wilms tumor. Tumor stage remains the primary factor influencing patient survival.

**Keywords:** Wilms tumor, COG, SIOP, overall survival, event-free survival.