ONCODAILY MEDICAL JOURNAL

abstract

Investigation of Total Diagnostic Interval for Pediatric Brain Tumors Referred to MAHAK Hospital

Mandana Tasbihi, Mithra Ghalibafian, Mahyar Nourian, Sahar Arbab Solimani, Negin Jafariyan Lahijani

doi.org/10.69690/ODMJ-018-0425-1705

SIOP ASIA 2025
SAUDI ARABIA

ONCODAILY MEDICAL JOURNAL

SIOP ASIA 2025 SAUDI ARABIA

Investigation of Total Diagnostic Interval for Pediatric Brain Tumors Referred to MAHAK Hospital

Author: *Mandana Tasbihi [1], Mithra Ghalibafian, Mahyar Nourian, Sahar Arbab Solimani, Negin Jafariyan Lahijani*

Affiliation: *[1] Mahak Hematology Oncology Research Center (Mahak-HORC) Mahak Hospital, Shahid Beheshti University of Medical Sciences, Tehran, Iran*

DOI: *https://doi.org/10.69690/ODMJ-018-0425-1705*

Introduction: Pediatric brain tumors (PBTs) are the second most common cancer in children, following leukemia. The UK has launched the HeadSmart campaign to educate healthcare professionals and the public. There is a lack of comprehensive studies on total diagnostic interval (TDI) in countries like Iran, where only limited data are available regarding symptom onset and treatment initiation.

Methodology: We reviewed the data of patients who visited MAHAK Hospital in 2023 and 2024. A total of 221 patient records were analyzed, including anonymized demographic information, diagnosis, and dates of symptom onset and presentation. Key outcome measures such as the TDI, patient interval (PI), and system interval (SI) were calculated.

Result: A total of 1,269 children diagnosed with brain tumors visited MAHAK Charity Organization from 2013 to 2023 (from 41 treatment centers). Among them, 241 patients have recovered, 230 are undergoing treatment, 261 have discontinued treatment, and 537 have passed away. The analysis of 221 patients visiting MAHAK Hospital revealed notable patterns regarding the TDI, PI, and SI across three different age groups (0-6 years, 7-11 years and 12-18 years old) and tumor locations of which 128 were female and 93 were male. Additionally, 55% of them were in the age group of 0 to 6 years, 30% were in the age group of 7 to 11 years, and 15% were in the age group of 12 to 18 years.

Conclusion: By conducting educational programs for various groups, including general practitioners, pediatricians, healthcare staff, and the general public, we can shorten or minimize the time between the onset of symptoms and the diagnosis of a tumor. We need to compare the survival rates of patients who were diagnosed earlier with those who were diagnosed later in order to provide a comprehensive report on the impact of diagnosis timing on outcomes.