

A Case of Hepatoblastoma in an Infant with an Extremely Low Birth Weight

Tatsuki MIYAMOTO¹⁾, Fumio YANAI¹⁾, Goro SHIROTANI¹⁾,
Naomi MORISHIMA¹⁾, Keiko NIBU¹⁾, Yoichiro OKA²⁾,
Koushi ASABE²⁾, Takayuki SHIRAKUSA²⁾, Go YAMAMOTO³⁾,
Kazuhiko MURAMATSU³⁾ and Shinichi HIROSE¹⁾

¹⁾ Department of Pediatrics, Faculty of Medicine, Fukuoka University

²⁾ Department of Thoracic, Endocrine and Pediatric Surgery, Faculty of Medicine, Fukuoka University

³⁾ Department of Pediatrics, Fukuoka Tokushukai Medical Center

Abstract : We herein report a patient with hepatoblastoma who was born at 29 weeks and one day of gestation with a birth weight of 507 g, thus presenting as an extremely low birth weight infant. The patient received oxygen for 320 days at the neonatal intensive care unit. His care continued at the outpatient clinic because of low body weight gain until he was thereafter found to have an abdominal tumor when he was 12 months old. The histology was poorly differentiated (fetal and embryonal) type hepatoblastoma, and the clinical stage was according to the Pre-Treatment Extent of Disease System by the International Society of Pediatric Oncology. He received a liver transplant from his mother because chemotherapy was ineffective. He died 10 months after the transplantation because of a relapse of the tumor. The incidence of hepatoblastoma is higher among low birth weight children than those born with a normal birth weight. A lower birth weight correlates with a higher incidence of hepatoblastoma. The administration of oxygen, which is necessary for the low birth weight infants, is thought to be related to the occurrence of hepatoblastoma. As a result, low birth weight infants with a high risk of developing hepatoblastoma therefore need a careful follow-up.

Key words : Hepatoblastoma, Extremely low birth weight infant, Oxygen, Follow-up