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Usefulness of asialoglycoprotein receptor imaging for the evaluation of liver metastasis of neuroblastoma

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Neuroblastoma, derived from the neural crest ectoderm, is the most common type of solid abdominal mass seen in infancy. The diagnosis, staging, and follow-up of neuroblastoma are often performed using metaiodobenzylguanidine (MIBG) imaging. However, the evaluation of liver metastasis by this method is complicated by the normal physiological uptake of MIBG by the liver. The asialoglycoprotein receptor is a hepatic cell-surface receptor specific for galactose-terminated glycoprotein, and ^{99m}Tc-DTPA-galactosyl human serum albumin (GSA) accumulates selectively in hepatic cells. Here, we report a case of congenital neuroblastoma with liver metastasis in which GSA scans were useful for differentiation between normal and metastatic sites in the liver.

Key words: neuroblastoma, liver metastasis, MIBG, GSA, asialoglycoprotein