Proc. Annual Meeting of Endocrine Society ROC,
pp. 24-25 (1986)

1—9 (4:12 ～ 4:24)

自體免疫性甲腺低能症母親生產之家族性新生兒過渡型甲腺低能症

Δ蕭廣仁、*樂俊仁、*楊義明
榮民總醫院醫学研究部
基督教門諾醫院小兒科

Familial Neonatal Transient Hypothyroidism Born by A Mother with Autoimmune Hypothyroidism

ΔKwang-Jen Hsiao, *Zun-Jen Lo, *Yih-Ming Yang
Department of Medical Research, Veterans General Hospital, Taipei and Department of Pediatrics, Mennonite Christian Hospital, Hualian, Taiwan, R.O.C.

A female newborn (H.R.) with hypothyroidism was detected by our neonatal screening program (TSH >160 mU/L blood). Serum T_4, T_3 and TSH were 2.1 ug/dl, 21.6 ng/dl and 199 mU/L, respectively Postnatal hypotonia, poor activity, poor feeding and prolonged jaundice were observed. Thyroxine replacement therapy was started at age of 23 days. Since the pareents had been experienced in neonatal transient hypothyroidism with their first femal child (C.W.), they stopped the treatment of the infant (H.R.) at age of 3 months. The infant was found to be euthyroid since then. Their first child (C.W.) was also found as hypothyroidism (Serum T_4 o.6 ug/dl and T_3 29.2 ng/dl) due to postnatal hypotonia, poor activity and prolong jaundice in the neonatal period. The thyroxine replacement therapy was initiated at age of 28 days and lasted for 5 months. The euthyroid was kept after the self termination of thyroxine treatment.

Follow up study of these two children (Age: H.R. 9.5 months, C.W. 3 years and 5 months) found normal with thyroid function, thyroid scan (^{99m}Tc), bone age, and growth. But, of them had very mild mental development delay (IQ/DQ 78-85). Physical examination, inculding thyroid, of the mother was apparently normal. But hypothyroid function (Serum T_4 < 2.0 ug/dl, T_3 48.3

ng/dl, TSH 38.0 mU/L) and serum antimicrosomal antibody (1:640) were found. The results indicated that this familial neonatal transient hypothyroidism may be caused by transplacental passage of thyrocytotoxic antibody from mother to fetus. The long term effects of this congenital (possible intrauterine) autoimmune thyroiditis and early thyroxine replacement therapy remain to be established.

by
,
ly
ed

irst
nt
roid
hy-
al
al
ge
after

nths,
on,
had
l
ly
48.3