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PERINATAL DISORDERS

BRACHIAL PLEXUS PALSY

The neonatal and follow-up records of 52 children with neonatal acquired brachial plexus palsy (BPP), born in 1981-89 in a mixed urban-rural county of Skaraborg, Sweden, were analyzed retrospectively at 4-14 years after birth and motor handicaps were evaluated at the Department of Child Habilitation, Central Hospital, Skovde, Sweden. Mothers' recollection of the birth, recorded at interview, was compared with control groups. In the national series, the incidence of BPP increased significantly from 1.4/million in 1980 to 2.3/m in 1994. In babies born 1988-1991, the incidence of BPP was 45 times higher in larger babies, >4500g, compared to those with birth weights <3500g. Half the children had birth weights exceeding the mean +2SD. In the regional Skaraborg series of 52, delivery was vertex in 39, breech in 2, and none by Cesarean section. The mothers recalled a difficult birth in 77% of BPP cases compared to 20% and 27% in the two control groups. One-third had perinatal distress. At examination at birth or in the neonatal ward, one half had total arm flaccidity, 8 mainly shoulder paralysis, and 8 a general arm weakness. At early follow-up exam, 18 (44%) had arm weakness, severe in 9 (22%) and moderate in 9. Function was restored (or almost restored) in 20 at an average of 6 months, and permanently impaired in 22 at an average of 15 months (range 5-32 months). (Bager B. Perinatally acquired brachial plexus palsy - a persisting challenge. Acta Paediatr November 1997;86:1214-1219). (Respond: Dr B Bager, Dept of Child Habilitation, Central Hospital, Skovde, Sweden).

COMMENT. Brachial plexus palsy (BPP) is a significant cause of motor handicap in children in Sweden, especially in those with higher birthweights and perinatal distress, and the incidence is increasing. More than threefourths of mothers interviewed recall a difficult or very traumatic delivery. Despite regular supervision and rehabilitation from the first week, one-half will have persisting functional impairment at 15 months, severe in 25%.

For recent reports of BPP in the United States, including EMG findings, see Progress in Pediatric Neurology III, PNB Publ, 1997;pp357-9.

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