

WEIGHT LOSS - A FACTOR IN THE DEVELOPMENT OF KERNICTERUS. Audrius V. Plioplys, Fredric Kleinberg, and Haruo Okazaki, Department of Pediatric Neurology, Mayo Clinic, Rochester, MN

Autopsy data on all newborns who died between 1974 and 1980, inclusive, were reviewed. From the 230 autopsies, 26 cases of kernicteric staining of the brain were identified. A control group of nonkernicteric infants was retrospectively selected. Differences in the following factors between the two groups were not statistically significant: maternal prenatal factors; natal factors; birth weight; incidence, type, and severity of postnatal illnesses; administration of fluids and medications; anoxia; acidosis; hypoglycemia; hypernatremia; peak total serum bilirubin; and bilirubin at 24 hours of life. Logistic regression analysis of these factors was likewise unrewarding in distinguishing the two groups. The methods of bilirubin therapy in the two groups did not differ. Nevertheless, the incidence of kernicterus in male infants was increased ($p < 0.05$), and the maximal percentage of weight loss was significantly associated with the occurrence of kernicterus ($p = 0.022$). The association of weight loss with the development of kernicterus has not been previously reported.