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Taiwan Infant Developmental Collaborative Study Group

Development of VLBW premature babies to appropriate-weight and overweight babies
Chen Yin-Yao and Xie Kai-Sheng

Pediatrics Departments of National Taiwan University Hospital, Mackay Memorial Hospital, Taipei Veterans Hospital, National Cheng-Kung University Hospital, China Medical College Hospital, and Children’s Hospital of Chang-Gung Memorial Hospital at Kaohsiung.

Development of appropriate-weight and overweight babies (among VLBW babies) before 24 months old is examined in the research. 9.0% of the former and 10.9% of the latter suffer from growth failure in weight; 7.9% of the former and 9.5% of the latter suffer from growth failure in height; 13.8% of the former and 16.2% of the latter suffer from growth failure in head circumference. Among all the failure percentages, the highest one is that of head circumference, and such failure is due to the influences of most factors. Height growth failure, on the contrary, is a result of less factors.

84.7% of the appropriate-weight babies need oxygen or other first aid treatment after delivery; 39.4% of them suffer from low or high blood sugar level when first entering hospital; 14.2% of them suffer from hypotentional seizure. 35.7% of them need patent ductus arteriosus treatment and 75.8% of them suffer from cease of breath or slowing down of heartbeat and hence need oxygen, medical, and respiratory treatment.

47% of them suffer from pathological changes at retina, and 10.8% of them develop chronic pulmonary diseases.

With regard to outpatient follow-up, appropriate-weight babies still have worse development of weight, height, and head circumference as compared with full term babies, a statistically important finding.

The appropriate-weight babies and overweight babies with more birth weight tend to have better weight, height, and head circumference development at the 24th month. Babies born at different weeks of gestation showed no significant differences in weight and height development. But regarding head circumference, babies born at
more weeks of gestation tend to have better head circumference development.