Percentile values for the anthropometric dimensions of triplet neonates – analysis of perinatal survey data of 2007–2011 from all states of Germany


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In this paper we present national reference values for birth weight, length, head circumference, and weight for length for newborn triplets based on data from the German perinatal survey of 2007–2011. We had available perinatal survey data of 3,690 newborn triplets from all the states of Germany that were kindly provided to us by the AQUA Institute in Göttingen, Germany. Not all the datasets were complete. Data of 3,567 newborn triplets were included in our analyses, which were performed at the Max Planck Institute for Demographic Research in Rostock, Germany. Sex-specific percentile values were calculated using cumulative frequencies. Percentile values at birth were computed for the 3rd, 10th, 25th, 50th, 75th, 90th, and 97th percentiles for neonates born after 21–36 completed weeks of gestation.

Comparison was made to values for singletons and twins. The differences in the 50th birth weight percentiles between singletons and triplets after 32 completed weeks of gestation were 180 g for girls and 210 g for boys; after 34 weeks of gestation the differences were 320 g and 325 g, respectively. The differences between twins and triplets after 32 weeks of gestation were 100 g for girls and 120 g for boys; after 34 weeks of gestation they were 130 g and 135 g, respectively.

The data presented in this paper allow for newborn triplets to be classified according to somatic parameters with reference to German perinatal data.

Fig. 1 and 2 demonstrate these percentiles for birth weight and length for male and female neonates.