Head and chest circumferences as predictors of low birth weight in Indian babies. Verma SS, Ghadiok AK, Kishore N, Singh OP. Defence Institute of Physiology & Allied Sciences, Delhi, India.

This study attempts to select predictors for indirect estimation of low birth weight from three important anthropometric measurements (viz. body length, head and chest circumferences) taken at birth. The data of 422 Indian low birth weight babies have been used to select the best combination of predictors by examining the separate effect of each of the three concomitant variables on birth weight using the technique of multivariate regression analysis. The combination of head and chest circumferences was found to be the best combination of predictors for estimation of birth weight in view of the simplicity and non-invasiveness of measuring these two body circumferences. A nomogram has also been constructed to predict low birth weight from head and chest circumferences. This nomogram will serve as a simple and quick procedure for predicting low birth weight from head and chest circumferences whenever the direct weighing at birth is not feasible.