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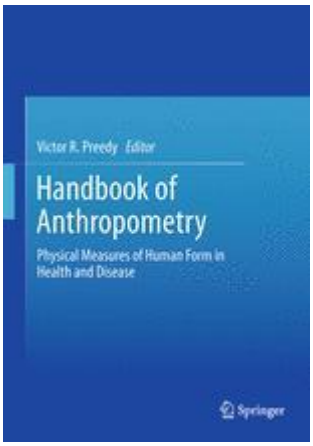
Neonatal anthropometry: a tool to evaluate the nutritional status and predict early and late risks

- Luis Pereira-da-Silva

Abstract

Neonatal anthropometry is an inexpensive, noninvasive and convenient tool for bedside evaluation, especially in sick and fragile neonates. Anthropometry can be used in neonates as a tool for several purposes: diagnosis of foetal malnutrition and prediction of early postnatal complications; postnatal assessment of growth, body composition and nutritional status; prediction of long-term complications including metabolic syndrome; assessment of dysmorphology; and estimation of body surface. However, in this age group anthropometry has been notorious for its inaccuracy and the main concern is to make validated indices available. Direct measurements, such as body weight, length and body circumferences are the most commonly used measurements for nutritional assessment in clinical practice and in field studies. Body weight is the most reliable anthropometric measurement and therefore is often used alone in the assessment of the nutritional status, despite not reflecting body composition. Derived indices from direct measurements have been proposed to improve the accuracy of anthropometry. Equations based on body weight and length, mid-arm circumference/head circumference ratio, and upper-arm cross-sectional areas are among the most used derived indices to assess nutritional status and body proportionality, even though these indices require further validation for the estimation of body composition in neonates.




Chapter 65
Neonatal Anthropometry: A Tool to Evaluate the Nutritional Status and Predict Early and Late Risks

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