

## **Nutritional impairment among patients with early rheumatoid arthritis attending rheumatology clinic in a tertiary care hospital, Sri Lanka**

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Quantification of body composition alterations and identification of nutritional risk factors among Rheumatoid Arthritis (RA) patients are clinically important. The objective of the study was to determine selected nutritional and anthropometric parameters of patients with early RA. A case control study was carried out at the Rheumatology Clinic of Colombo South Teaching Hospital among 100 early RA patients (disease duration of RA < 4 years) and age, gender and functional status matched healthy controls (n=100). Height, Weight, Waist Circumference (WC), Hip Circumference and Serum Haemoglobin (Hb) levels of patients and controls were assessed. The data were analyzed using the SPSS statistical package (version 20). Ethical approval was obtained from the Ethics Review Committees of the Faculty of Medical Sciences, University of Sri Jayewardenepura and Colombo South Teaching Hospital. A majority of the patients were female (84%). Female RA patients had significantly high values of BMI ( $27.1 \pm 4.4 \text{ kg m}^{-2}$ ,  $p=0.003$ ), WC ( $97.6 \pm 11.9 \text{ cm}$ ,  $p=0.000$ ) and waist to hip ratio ( $0.99 \pm 0.10$ ,  $p=0.005$ ) compared to female healthy controls (BMI-  $25.1 \pm 3.5 \text{ kg m}^{-2}$ , WC-  $89.6 \pm 9.7 \text{ cm}$ , and waist to hip ratio -  $0.93 \pm 0.06$ ). Serum Hb levels of male ( $12.45 \pm 1.18 \text{ g dl}^{-1}$ ) RA patients were significantly low ( $p=0.001$ ) compared to healthy males ( $14.6 \pm 2.0 \text{ g dl}^{-1}$ ). Anaemia was observed among 48 % of total early RA patients and 4% of healthy controls. A majority of RA patients had anemia and anthropometric impairment compared to healthy controls even from the early stage of the disease.

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