Haematological profile of sickle cell anaemia and thalassaemia from central India

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The aim of the present study was to determine the haematological profile of sickle cell anaemia (SCA) and thalassaemia (β-Thal) from Central India. Both SCA and β-Thal are a major public health in the world in general and India in particular where about 42 million sickle cell trait (SCT) and about 3.5 million β-Thal carriers live in India with its predominance in central and southern India. Haematological tests on 2769 premarital children aged 6-14 years comprising of 2224 controls, 438 carriers for SCA and 107 carriers for β-thalassaemia were performed. Low RBC, MCV, Hb, RDW, MCH, and MCHC and high WBC, MPV, HCT, and platelet dominate the haematological profile among SCT and β-Thal carriers compared to normal children. Slightly higher macrocytic cell morphology of sickle cell anaemia was major concerned. The mean Hb level among the carriers of sickle cell anaemia (12.82 ± 2.11 g/dl) was adequate but for β-Thal (10.89 ± 1.89) it was considerably low. Microcytosis and hypochromia seen by the low mean values of mean corpuscular volume (MCV) and mean corpuscular haemoglobin (MCH) in the β-thalassaemia.

Speaker Biography

Bhaskar Urade completed PhD from Pt. Ravishankar Shukla University, Raipur, Chhattisgarh, India. He is a Superintending Anthropologist (Physical) and In-Charge of DNA Lab. He has published 20 research articles in various journal of national and international repute and have been cited over 223 times. He has also published one book from LAP Academic Publication, Germany. He is an editorial Board Member of International Journal. Publication H index is 5. He served as Assistant Professor in Pune University and taught anthropology at Post Graduate level. He is working in the field of population genetics, human genetics, molecular anthropology, human genome.

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