

Incidence of Sickle Cell Haemoglobin among the Thotis of District Adilabad, Andhra Pradesh

A.M. Elizabeth¹, K.N. Saraswathy², M.P. Sachdeva³ and A.K. Kalla

¹*Department of Population Genetics and Human Development,
National Institute of Health and Family Welfare, New Delhi 110 067, India*

²*Department of Molecular Genetics. Albert Einstein College of Medicine of Yeshiva University,
Jack and Pearl Resnik Campus, 1300 Morris Park Avenue, Bronx,
New York 10461*

³*Department of Anthropology, University of Delhi. Delhi 110 007, India*

KEYWORDS Primitive Tribe. Sickle Cell Hemoglobin. Andhra Pradesh

ABSTRACT The study deals with the incidence of sickle cell anemia among the Thotis, a primitive tribe of Andhra Pradesh. The sample comprises of 397 individuals (188 males and 209 females). Among the 12.84 percent individuals who had sickle cell diseases, 9.32 percent were heterozygous (AS) for sickle cell trait while 2.52 percent were homozygous (SS). Genes A and S have the frequencies of 0.92 and 0.08, respectively. Generation-wise comparison of the distribution of sickle cell trait among the Thoti tribal population shows similar frequency (16.07%) of sickle cell disease in the offspring as well as the parental generation. But the offspring had less number of (12.50%) heterozygous (AS) and more number of (3.57%) homozygote (SS) for sickle cell disease than the parental generation (AS = 14.20%, SS = 2.38%).