© Kamla-Raj 2006 PRINT: ISSN 0972-3757 ONLINE: 2456-6360 Int J Hum Genet, 6(4): 287-290 (2006) DOI: 10.31901/24566330.2006/06.04.02

A Sickle Cell Disease Carrier Family with a Pair of Dizygotic Twins from Kalahandi District of Western Orissa, India

R. S. Balgir

Division of Human Genetics, Regional Medical Research Centre (ICMR), Opposite Kalinga Hospital, Chandrasekharpur, Bhubaneswar 751 023, Orissa, India E-mail: balgirrs@yahoo.co.in

KEY WORDS Sickle cell disease; hematological disorder, twins; carrier parents; environment

ABSTRACT The sickle cell disease is a genetically inherited commonly encountered hematological disorder that causes high degree of morbidity, mortality and fetal wastage. The suspected cases of hemoglobinopathies suffering from anemia are routinely referred from different peripheral Primary Health Centres and Hospitals in the state of Orissa (India) to our Centre for detailed investigations and genetic/marriage counselling. Of these, a scheduled caste (Domb) family with twin children was referred from Kalahandi district of the state and was studied in detail. A carrier couple of sickle cell disease had born twin offspring with both carrier as well as the homozygous sickle cell disease. It is a rare occasion when a single pregnancy carries either two or more distinct abnormal genotypes at a time in a womb in human beings. Dizygotic twins are genetically different and provide appraisal of the expression of different genotypes under the same environment.