

A Modified Method of Haemoglobin Typing From Bloodstains: An Eclectic Approach

M.P. Sachdeva, K.N. Saraswathy, A.M. Elizabeth, Rewa Chaudhury¹ and A.K. Kalla

Department of Anthropology, University of Delhi, Delhi 110 007, India

¹Lady Hardinge Medical Colleg, New Delhi 110 001, India

KEYWORDS Haemoglobin S. Bloodstains. Thotis. Andhra Pradesh

ABSTRACT Haemoglobin is the major protein of human red cells, comprising about ninety-five percent of their dry weight. Hb is important both in anthropology and forensic serology as it exhibits a very large number of genetic variants, a few of which are comparatively common and conveniently detectable in fresh blood by electrophoresis. Of these, the most common variant is probably haemoglobin S. Differentiation of Hb A, F, S and C from dried blood stains in criminal investigation as well as from blood samples brought on filter paper strips for anthropological studies, is usually not possible beyond three months or so. Here, the researchers describe a modified citrate agar gel electrophoresis method whereby it is possible to distinguish A, F and S from blood stains more than a year old. Five hundred and ninety samples (590) belonging to Thoti tribal of Andhra Pradesh have been successfully typed by this method.