

Paternity study in Chilean families using DNA fingerprints and erythrocyte blood markers Estudio de paternidad en familias Chilenas por impresión dactilar de ADN y marcadores sanguíneos eritrocitarios.

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In the last decade, the electromorphic phenotype corresponding to extremely polymorphic zones of DNA, that include variable number of tandem repeat loci (VNTR) of oligonucleotide sequences, have been added to classical markers to elucidate the problems of parenthood identification and ascription in human beings. Using VNTR of several loci, a band profile practically unique for each individual is obtained (DNA-fingerprints). Since the pattern of VNTR electrophoretic bands is inherited from parents in a proportion of 50% from each one, this system is extremely useful for paternity ascription or exclusion. Nine nuclear families were studied, randomly selected from a group of 170 families that were analyzed using 5 erythrocyte genetic markers and with VNTRs detected using the multi locus probe (CAC)₅, aiming to explore the concordance of both methods. Results were similar for both methods; however for VNTR, there is no information available on population frequency of polymorphisms.