

Y-Chromosome DYS392 Polymorphism Analysis in Two Population Samples from Central and Northern Italy

U. Ricci¹, N. Cerri², F. De Ferrari², F. Vieri¹, S. Guarducci¹, C. Biondi¹, M.L. Ventruto¹, M.L. Giovannucci Uzielli¹

¹ Genetics and Molecular Medicine, Department of Paediatrics, University of Florence,
Via Masaccio 209, 50132 Florence, Italy

² Institute of Forensic Medicine, University of Brescia, Spedali Civili, 25100 Brescia, Italy



Y-chromosome DNA polymorphisms are increasingly being used for various basic and applied researches. At our Centre, molecular analysis of the Y-chromosome is performed for several studies in the following fields: characterisation of specific regions of the Y-chromosome, in order to study the genotype-phenotype correlation in various genetic syndromes, in males and females; solution of forensic medicine problems using an increasing number of markers; populations genetics. information of great interest, and a continuously increasing data base, are obtained from the analysis of many tetra-, tri-, and di-nucleotide polymorphisms, from consistent and well chosen population groups. At present time we are especially studying six markers (DYS-19, DYS-388, DYS-390, DYS-391, DYS-392, DYS-393) suggested in the multicentric study by Kaiser, de Knijff *et al.*(1997). In this paper we report the results of our research on the distribution of the DYS-392 polymorphism in two population samples, respectively from areas of Florence (central Italy) and Brescia (Northern Italy). A total of 300 alleles were analysed, from non consanguineous subjects. The DNA was extracted from blood samples, using a saline method. PCR amplification was firstly monitored on horizontal agarose gel, followed by vertical PAGE (7M urea), gel electrophoresis and silver staining to detected the alleles. Therefore, the genotypes were combined with precedent database obtained for DYS19 locus to construct a preliminary haplotype.

REFERENCES

- Kaiser M *et al.*. Evaluation of Y-chromosomal STRs: a multicenter study. *Int J Leg Med* 1997; **110**: 125-133.
De Knijff P *et al.* Chromosome Y microsatellites: population genetic and evolutionary aspects. *Int J Leg Med* 1997; **110**:134-140.