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*PD en Análisis Forense***DISSECTION OF THE DF27 PATERNAL LINEAGE IN SOUTH-WESTERN EUROPE/ DF27
AITAREN LEINUAREN ANALISIA EUROPAKO HEGO-MENDEBALDEAN**

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The analysis of Y chromosome SNPs (Y-SNPs) has revealed the existence of specific paternal lineages in human populations at continental and regional level, being the haplogroup R-M269 the most common in Central and Western Europe. Among its many subhaplogroups, DF27 (which branches from P312/S116) has revealed a striking frequency in the Iberian Peninsula, showing maximal frequencies in the Basque Country. The aim of the present research was to investigate in detail the structure and variability of the DF27 haplogroup in populations from the Iberian Peninsula and South-Western Europe and to compare these distributions to other worldwide populations. A total of 2,993 male individuals from 32 populations located in Spain, Portugal, France and Ireland were analyzed for the DF27 lineage and its subhaplogroups Z195, Z196, S356, Z278, M153, L176.2 and M167. Additionally, frequency data from eight other populations of Europe and South America were compiled from the 1000 Genomes Project. Our results reveal a high frequency of haplogroup DF27 in the Iberian Peninsula (30-40%). However, outside of Iberia the frequency is below 15%. In Ireland there is only a trace frequency of DF27 (<1%), while in France frequency decreases as it gets further away from the Iberian Peninsula, from 17% to 5%. Z195 lineage's main subhaplogroups, S356 and L176.2, display significant differences in their frequency distribution among the Iberia. S356 has maximum frequencies in native Basques (28%), while L176.2 reaches the maximum frequencies in the north-east area (>10%). Similarly, the frequencies of S356 and L176.2 subhaplogroups maintain their maximum frequencies in the same geographical area as their predecessor haplogroups. In conclusion, this study provides a detailed perspective of the structure and variability of DF27 lineage and its sublineages, which were confirmed to be almost privative of the Iberian Peninsula.