

The aim of this diploma thesis was the initial genetic analysis of early mediaeval burial site from Mlekojedy polycultural locality (Litoměřice District, Czech Republic). Autosomal STR markers were chosen because of the following reasons. The high degree of polymorphism of these markers and the high extent of heterozygosity favor the use of STRs instead of mitochondrial DNA for the structural analysis of small populations. Usefulness of STR typing for validation purposes was demonstrated many times before. We used primers for miniSTRs to obtain the fullest results. Nuclear DNA was extracted from 35 % of bone samples and 91 % of teeth. We detected lower PCR amplification success rate of fragments longer than 150 bp and very high rate of allele drop-out which is sign of degraded DNA. Twelve reliable genotypes were determined for TH01 marker. Observed allele frequency and genetic diversity values were discussed in comparison with recent populations and other aDNA studies of burial sites.

Keywords: ancient DNA, STR markers, miniSTR, early medieval burial site, Czech population