LIKELIHOOD RATIO (LR) FOR SIBLINGS – ITS VARIABILITY AND PRECISION WITH USAGE OF THE NEW GENERATION KITS

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The identification of human remains sometimes comprises potential siblings, especially when there are no relatives in a direct line (parents or offspring). The samples should be always stored in order to be able to go back to them when additional analysis is necessary. Otherwise the problems can occur, mainly when different kits having different loci are used. The aim of this study was to focus on a determination of LR for siblings and to examine changes in values if 8 or 15 loci were taken into account for LR calculation. LR values fluctuated in the interval from 4.15 up to 273 million. In case of 15 loci usage the change of LR raised from 10 times up to 10,000 times. To support the kinship testing, additional tests, e.g. Y-STR or X-STR analysis should be performed, in order to use all available intelligence to make the right conclusion report.