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POSITIVE IDENTIFICATION FACILITATED BY IMPLANTED METALLIC PLATE AND SCREWS

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Souhrn

Identifikace osob patřící v soudně lékařské praxi k základním úkolům. Autoři uvádějí identifikaci osoby ze skeletizovaných pozůstatků lidského těla podle implantovaných kovových materiálů – destičky a šroubů.

Summary

Personal identification is an essential subject in forensic practice. With skeletonized remains, an anthropological examination is performed for personal identification [5, 6]. Here we describe the positive identification of skeletonized human remains from the serial numbers of implanted metallic plate and screws.

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CASE HISTORY

Almost completely skeletonized human remains were discovered in a mountain area. Routine examination lead us to determine that the deceased was a male of 40–50 years of age. Inspection indicated healed fractures in the bilateral ulna and radius, right tibia and calcaneus with surgical intervention involving metal plate and screws, but no evidence of recent injury was recognized. The serial number of each of the metal plate and screws was identified (Figure 1). Based on these serial numbers, the person thought to correspond with the remains, was identified by the authorities. Superimposition of his picture showed a perfect match.



Figure 1. The metal plate and screws in right tibia and calcaneus. Each serial number was identified

It is common to use dental findings, radiological characteristics and DNA typing for the personal identification of skeletal remains [2, 3, 5, 6]. However, such antemortem data as victim's dental records, radiograph or DNA profile are necessary for the comparison. Discrete anatomical abnormalities such as healed fractures, prostheses, bone disease and surgical artifacts are also useful individual characteristics [6]. In the present case, there were multiple previous fractures with surgical intervention involving metal plate and screws, the serial numbers of which facilitated the positive identification. It has been reported that various kinds of implanted medical devices provide useful information [1, 4]. Implanted plate and screws can indeed provide useful information for personal identification.

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