



### F17 Case of Dental Identification Helped by Previous Professional Negligence

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This presentation will illustrate how the presence of previous dental professional incompetence can help in forensic dental identification.

This presentation will impact the forensic community and/or humanity by demonstrating the use of non-conventional findings in forensic dental identification. An interesting case will be presented.

Postmortem identifications using dental data are usually limited in young individuals within five to ten years of final development of permanent teeth. During dental examinations of these patients, many individual characteristic features may not appear in an average dental report during office visits, making future dental comparisons difficult. Many

young dental patients have no dental complaints, no disease conditions and no dental restorations. This can make dental identifications of young individuals even more difficult. Dental screening during office visits usually end with mark "sine morbo" (no disease).

We would like to show a case of 17-year-old male. His badly decomposed body was found in a river. He had thirty-two fully developed teeth, no caries was present. The maxillary anterior teeth showed mild crowding and the mandibular anterior teeth showed moderate crowding. There were orthodontic bands present on teeth #s 19 and 30. An orthodontic band was also seen on tooth #3 and a bondable single buccal tube was attached to tooth #14. This tube was originally intended to be used on tooth #15. Between teeth #s 4 and 13 was an esthetic orthodontic device with brackets.

Using the missing persons list, one young individual was in a similar phase of orthodontic treatment. Talking to his dentist, he did not rule out the possibility that the dental status we found was his former patient's, but did not reassure us either.

We found three mistakes made during the application of the orthodontic device, the treating orthodontist made these against the rules of the profession.

1. An inappropriate single bondable buccal tube was glued to tooth #14.
2. This tube was already used before. (heat damage)
3. At tooth #7, the arch wire was set under the lower bracket wings and the ligature was bound in the slot. (Uncommon method of intrusion)

During the next formal conversation with the treating dentist, we confronted him with our findings; he confessed that he made those irregular orthodontic interventions. In our unique case, the orthodontic maltreatment of the patient allowed us to perform successful forensic dental identification which led to full identification of an unknown young individual. The case will be illustrated with ample photographs.

**Dental Identification, Professional Negligence, Orthodontics**