



Odontology Section – 2011

F6 The Dental Identification of a U.S. WWI Service Member

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This presentation will provide attendees the opportunity to view a case involving the identification of a U.S. service member who was lost in France during WWI. Upon the completion of the presentation, the audience will be able to appreciate the effort made by the U.S. Government and their quest to account for service members missing as a result of our nation's past conflicts, witness the dental care that was performed in the early 1900s, and to learn from the thought process that progressed through the case.

This presentation will impact the forensic science and dental communities by providing an example of a positive identification of a previously unidentified U.S. service member who was lost over 90 years ago and how the obstacles that were presented while working on this case were overcome. The knowledge gained was very basic, but was essential to support his opinion while writing the forensic odontology report. Multiple hurdles which had to be met included: obtaining personnel/dental records, properly interpreting these records, and researching/reviewing standard dental care of the early 1900's.

The mission of the Joint POW/MIA Accounting Command (JPAC) is to achieve the fullest possible accounting of all Americans missing as a result of the nation's past conflicts. The majority of the forensic cases at the JPAC Central Identification Laboratory (CIL) involve losses during the Vietnam War, Korean War, and World War II. Thus, the opportunity to analyze remains from a WWI casualty is rare.

In September 1918, the Expeditionary Forces led by General John J. Pershing was engaged in the first U.S. led offensive of WWI. Of the 7,000 allied lives lost, 2,000 were American service members, with 11 U.S. Marines being listed as unaccounted for. In September 2009, French Nationals (relic hunters) reported they located a burial site containing the remains and artifacts believed to be those of an American service member. The men notified the proper French government authorities which lead to the contact with officials from JPAC. In October 2009, a JPAC team recovered the remains and material evidence. The remains were accessioned at the Central Identification Laboratory on October 26, 2009. The recovered dental remains consist of an attached maxilla and near complete mandible. Restorative, oral surgery (extractions), and endodontic procedures were all evident in the remains. Multiple teeth are restored with various dental materials (amalgam, porcelain, screw posts, and gold restorations). The dental remains were compared to the available antemortem dental information resulting in the following concordances: 15 unrestored teeth, 8 restored teeth, and three missing teeth. All lines of evidence (historical, anthropology, material evidence, and dental) corresponded to the associated casualty and circumstances of his loss. On April 1, 2009, the recovered remains of the WWI service member were positively identified at the JPAC CIL. On June 23, 2010, the remains were buried at Arlington National Cemetery with full military honors.

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