



G40 Tarawa Revisited: A Summary of Results

*Corinne D'Anjou, DMD**, 222 rue l'Espérance, Saint-Lambert, PQ J4P1Y2, CANADA; *James F. Goodrich, BDS**, 390 French Pass Road, RD 4, Cambridge, Waikato 3496, NEW ZEALAND; and *David R. Senn, DDS**, University of Texas HSC San Antonio, 7703 Floyd Curl Drive, Mail Code 7919, San Antonio, TX 78229-3900

After attending this presentation, attendees interested in dental identification will be better informed regarding the identification of recently recovered United States Marine Corps and Navy personnel who died during the World War II Battle of Tarawa.

This presentation will impact the forensic science community by summarizing the identification outcomes from the two missions in Betio, Tarawa, in the nation of Kiribati, and by explaining the multidisciplinary approach to the identification process by odontologists, anthropologists, DNA experts, and historians.

The Battle of Tarawa was an early battle in the Pacific Theater of World War II that was fought from November 20 to November 23, 1943. The battle took place in and around the southwest corner of the Tarawa Atoll in the Gilbert Islands. Nearly 6,400 men died during the battle, including American and Japanese servicemen plus Koreans who were there as Japanese-forced laborers. The majority of those men died on the island of Betio.

The remains of at least 42 individuals were recovered from a previously undiscovered post-battle cemetery on Betio Island, Tarawa Atoll, between March 2015, and March 2016. Anthropological examination results reported that the individuals recovered were males of predominately European or mixed European ancestry. Additional findings included that the remains were associated with many uniform and equipment items issued to United States military personnel. The remains of Japanese individuals were also recovered.

Antemortem military dental records were examined for 532 unrecovered service personnel presumed to have died during the battle. The associated oral and dental remains were examined, photographed, and radiographed. Re-association was required for some fragmented remains. WinID computer software was employed to aid in postmortem and antemortem data comparison. Dental age assessment techniques were applied to estimate the age intervals for the remains. Comparisons to OdontoSearch databases were performed to assess the relative comparative incidence of dental patterns for these servicemen when compared to a large database.

The combined efforts of the professional disciplines involved with the identification process resulted in a much higher rate of positive identification than was initially thought to be possible with recovered human remains of this type, especially when considering the nearly total lack of antemortem radiographs. The process of each discipline working in isolation to minimize confirmation bias and a subsequent reconciliation of the various results is an important feature of the approach taken in Tarawa. This presentation will detail the interplay of the various disciplines and their contribution to that process.

Forensic Odontology, World War II, Tarawa