

Beginning of Military Radiology

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Soon after Roentgen's discovery in December 1895, military medical staffs of various nations became interested in the diagnostic applications of the invention.

In March 1896, only a few months later, the Kaiser Wilhelm Academy in Berlin was equipped with the first military radiological unit. (Pakusch - 1982).

One month later, German Surg. General von Scherning and his associate Kransfelder published a paper on the use of X-Rays to detect bullet-wounds. (Grashey - 1922).

The following May, at Naples Hospital, Italian Surg. Lt. Col Alvaro used a radiological unit which had been installed to examine patients injured by bullet-wounds received during the Ethiopian campaign. (Allen - 1964).

French military medical staffs were not inactive; Kelsch, employed X-Rays in 1897 to carry out the first systematic radiological chest examinations in Desgenettes Military Hospital at Lyon. (Camelin - 1969).

During the Greco-Turk War in 1897, military radiological equipment was ready to be tested by the English (Abbott) and by German teams (Küttner). (Allen - 1964).

It was necessary to wait until the War-in-India (1897-1898) for the first appearance of a military radiological unit on the battlefield. That unit was used successfully by the English Major Beevor. (Allen - 1964).

In 1898, English Major Battersby used radiology in a similar manner to carry out examinations during the Sudan War. Old photographs show this installation located on the bank of the Nile - supplied by electric batteries being charged by means of a bicycle! (Glasser - 1959).

At the time of the Boer War (1899-1902), the Sudan equipment was transported to South Africa; and the electric-supply system was improved by English Lt. Bruce. (Allen - 1964).

During the Spanish-American War (1898), the U.S. Navy was particularly conspicuous and radiological units were installed in each of three ships - the "Relief", the "Missouri" and the "Bay State". This was not innovative: the Russian Cruiser "Aurora" was the first warship to be provided with a radiological unit.

The U.S. Surg. General Sternberg published a treatise in 1898 relating his experience on the use of radiology in war-time. (Allen - 1964).

Note now that from 1902 all German Military Hospitals were provided with a radiological unit, and Medical Field-Services were provided with mobile integrated equipment. (Pakusch 1982).

In 1904-1905 during the Russo-Japanese War, Japan used German equipment to carry out numerous radiographic examinations, which were reported by French Doctor-Major Matignon. (Allen - 1964).

Almost all of the belligerents in the First World War used portable radiological equipment usually mounted in a vehicle towed by a tractor. The same vehicle served as a dark-room. Electricity was supplied by dynamo driven by a petrol-engine. (Grashey - 1922).

The Between-the-Two-Wars period was notable for the appearance of lighter-weight equipment - and, above all, the introduction of protective measures against the X-Rays. Numerous civil and military radiologists had become victims, and were dying from ray-sickness.

During the Second World War, there were no important improvements of radiological units - Military-Medical useage of X-Rays was widespread.

The Korean War (1950-1953) brought to light no important changes of a fundamental nature, but the Japanese used radiological jeeps (Ryobei - 1961).

At the time of the Vietnam War (1965-1973), very highpowered radiological equipment made its appearance. Brigades were equiped with portable apparatus ranging from 100 milli amperes to 100 kilovolts and all military hospitals were fully equipped with apparatus from 300 mA to 100 KV.

Finally, since 1982, the U.S. Air Force has had available special expandable radiological containers fitted with radiographic fluoroscopic equipment ranging from 300 mA to 150 KV provided with the advantage of a mirror optical system. (Pakusch 1982).

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