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CZECH FIELD SURGERY

Historical Overview

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Field surgery is one of the oldest branches of medicine. The development of field surgery was influenced not only by the progress of medicine, but also by military tactics and by new weapons.

There is a more than 200-year old tradition in the training and education of military medical personnel in our country. This is comparable with other leading European countries. Our tradition is closely connected with Austrian history because the Czechs lived until 1918 under the Habsburg Monarchy.

In 1779 Emperor Joseph II charged his adviser and personal physician Giovanni Alessandro

Brambilla (1728-1800) with over-seeing the whole military medical service.

Brambilla proposed to the emperor the building of a new special school for military surgeons. In 1783 the construction of the Josephinum began. The Josephinum began operating on November 7th, 1785.

According to the emperor the mission of the Josephinum was to meet the following tasks:

- the education and training of military surgeons,
- the creation of a scientific society for research in medicine,
- the creation of a permanent field medical com-

mission to investigate the problems of providing medical aid on the battlefield.

Having a professor's post at the Josephinum was a question of prestige. Vienna as the capital of Austro-Hungarian monarchy was very attractive. A whole range of surgeons of Czech origin worked at the Josephinum. First of all let us mention *Prof. Dr. František Piřha (1810-1875)*. Many of his pupils rank among the outstanding figures of the Austrian military medical service and they comprise one of the two basic branches of the Czech school of field surgery. The youngest graduates of the Josephinum participated in the creation of the military medical service of the Czechoslovak Republic. Among the pupils of Piřha was the well-known war surgeon General Dr. Jan Strejček.

The Josephinum was closed for economic reasons in 1874.

The introduction of anesthesia and antisepsis in the second half of the 19th century meant a sharp increase in surgical interventions in the abdominal region, in the urogenital system and in joint and bone injuries.

The second branch of the Czech school of field surgery arose in the Department of Surgery of the Medical Faculty in Prague. As a consequence of many years fighting in the Monarchy the university in Prague had been divided into a German part, and a Czech part (on February 28th, 1882). At the same time the first Czech surgical clinic was founded. This institution concentrated on the questions of military medicine and field surgery from the outset of its activities.

Field surgery topics were the main focus of interest for all the chiefs of the first surgical clinic, not only on the theoretical but also the practical level.

From the outset the first chief of the clinic *Prof. Vilém Weiss (1835-1891)* dealt with gunshot injuries.

His successor, *Prof. Karel Maydl (1853-1903)*, led the clinic up to his death and contributed significantly to the development of field surgery (Fig. 1). Under his management the clinic achieved European reputation. Maydl, a pupil of Prof. Eduard Albert, chief of the surgical clinic in Vienna, took part in the war of Austria-Hungary in the territory of Bosnia and Hercegovina and in 1866 during the Serbian-Bulgarian war he was head of the military reserve hospital in Belgrade. He published his experiences concerning the organization of medical

support during the war and the treatment of gunshot injuries. In 1899 he was appointed associate professor in Vienna and was the first to lecture on field surgery. Among his most famous pupils were *Prof. Otakar Kukula (1867-1925)* and *Prof. Rudolf Jedlička (1869-1926)*.

Prof. Kukula led the clinic from 1904 and focused his activities on field surgery (Fig. 2). In 1897 he was appointed honorary member of the Association of Military Surgeons of the U.S.A. He published his experiences on the following topics: Gunshot injuries in the abdominal region, removal of projectiles, cerebral and spinal injuries, war fractures, gunshot injuries of the heart. In 1912 he organized the dispatch of two surgical groups to the battlefield in Montenegro and in 1913 he performed its long-term inspection. During the first world war he carried out the high functions of field medical inspection. He devised and constructed a mobile sterilizer for surgical instruments and dressing material, which became part of the equipment of the military medical service on the division level.

The second outstanding pupil of Maydl was Prof. Jedlička. He was a skilful operating surgeon and is considered the founder of the Czech rentgenology and radiology. Jedlička also worked from 1912 to 1913 in the Balkans and published extensive statistics, 1788 cases in all, of war injuries from the hospital in Belgrade. During the first world war he worked in field hospitals and from 1915 he led reserve hospital Nr. 3 Vyšehrad in Prague, where especially orthopedic cases were treated. The highest number of beds for soldiers was in Prague in 1915 - more than 22.000. More than half a million soldiers were treated in Prague military hospitals during the first world war. Jedlička himself organized care for disabled soldiers.

Prof. Jedlička's assistant Bohuslav Bouček, later became the first dean of the Medical Faculty in Hradec Králové, which was founded in 1945.

With the advent of the independent Czechoslovak Republic (1918) the first surgical clinic in Prague continued to focus its activities on field surgery topics. Cooperation with the military medical service was strengthened. The basic structure of the military medical service comprised a network of 12 division hospitals, the name of which was changed to the army corps hospitals in the middle of the 1930s. For almost the whole of this period the chief of the military medical service was Dr. Ludvík Fisher. At his instigation our military me-

dical journal „Vojenské zdravotnické listy“ was founded in 1925 and it is the oldest military periodical in our country. The first editor-in-chief of „Vojenské zdravotnické listy“ was General Prof. Dr. Karel Franz.

While the Josephinum branch of Czech field surgery came to an end, the second one in Prague developed further. Among the pupils of Prof. Kukula, who worked directly in the military medical service, let us name first *Col. Prof. Dr. Jan Levít (1894-1944)* (Fig. 3).

Kukula's pupils also included Prof. Stanislav Kostlivý, chief of the surgical clinic in Bratislava, Prof. Julius Petřivalský, chief of the surgical clinic in Brno and Prof. František Burian, the founder of Czech plastic surgery.

The best known pupil of Kukula is nevertheless *Prof. Arnold Jirásek (1887-1960)*, his successor in the management of the surgical clinic since 1927 (Fig. 4). His activities were closely connected with military medicine. He had wide experience in field surgery: 1912-1913 in the Balkan, 1914-1916 on the Russian front, 1917-1918 on the Italian front. His experiences were published in 21 publications. Jirásek founded Institute of field surgery in Prague in 1936. Thanks to him field surgery continued to develop up to the German occupation of Czechoslovakia in 1939. Arnold Jirásek contributed in particular to the medical support given during the Prague uprising of May 1945.

During the second world war more than 350 Czech and Slovak physicians worked in our military units abroad. Not only experienced doctors were involved but also medical students, who graduated during the war at English faculties. Among the well-known military doctors working abroad let us name for example Maj. Dr. Antonín Novotný, chief of the surgical ward of the Czechoslovak hospital in London-Hammersmith, Ass. Prof. Bohdan Hejduk - former assistant of Prof. Jirásek, who served in the US Army, Maj. Dr. Josef Škvařil, the chief surgeon of the Czechoslovak unit in the Soviet Union and Maj. Dr. František Engel. It is not possible to name all of them.

After the end of the war Prof. Jirásek continued to lead the Institute of Field Surgery and was a member of the military medical advisory committee. At his instigation the first Czechoslovak textbook of field surgery was published in 1950. He was the head of the first surgical clinic until 1959, when he was succeeded by Prof. Josef Pavrovský.

When the Military Medical Academy was founded in Hradec Králové in 1951 the centre of field surgery was consequently moved here. Ass. Prof. (later Professor and General) *Jaroslav Lichtenberg (1906-1997)*, pupil of Jirásek, became the head of the Department of Field Surgery (Fig. 5).

The Department of Field Surgery in Hradec Králové developed its activities first of all in the area of research and pedagogy. Analysis was carried out of the experiences of the second world war, and in particular new issues connected with the existence of weapons of mass destruction were also studied.

Cooperation with the local civilian specialists, Prof. Jan Bedrna and Prof. Jaroslav Procházka as well as with the First Surgical Clinic in Prague (Prof. Jirásek, later Prof. Pavrovský) continued intensively. The unified doctrine of field surgery and unified therapeutical procedures were elaborated.

After Prof. Lichtenberg, his pupil *Prof. Dr. Antonín Beneš (1916-1981)*, became the head of the Department of Field Surgery in 1958. Prof. Beneš takes credit for the further development of field surgery (Fig. 6).

His scientific work focused on the actual needs of field surgery and the medical support of casualties in the circumstances of a modern war. Up to 1980 the main attention was focused on the surgical issues of medical support of radiological mixtures.

In the 1960s and the 1970s Dr. Čestmír Reček, Dr. Aleš Mihula, Dr. Josef Čermák and Dr. Bohumil Konečný (later Colonel and Professor) were important mainstays of the Department of Field Surgery. Konečný assumed the management of the department in 1977 (Fig. 7). At the same time the younger generation of war surgeons was moving up: Dr. Ladislav Vykouřil, Dr. Karel Zahořák, Dr. Theodóz Suchý, Dr. Dušan Šimkovič, Dr. Ludovít Pintér and others.

Since 1991 under the management of Colonel Ass. Prof. Vykouřil the following surgeons have been working here: Dr. Leo Klein, Dr. Zdeněk Hajžman, Dr. Alexander Ferko, Dr. Jan Folvarský and others. But that is another chapter.

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6. Documents from the Military Historical Archives, Prague concerning General Dr. L. Fisher and General Dr. K. Franz

Note: Because we were obliged to use old archive materials the quality of some pictures is reduced.

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