

ORIGINAL ARTICLE

The History of Surgery in World War I: Erwin Payr (1871 – 1946)

Abstract

The Austrian surgeon Erwin Payr can be regarded as an extraordinarily influential scholar and physician, both for the development of surgical science and clinical medicine around the time of World War I. Today the “Payr’s sign” and the “Payr’s disease” in clinical medicine are closely associated with Erwin Payr’s name and surgical instruments, like the “Payr pylorus clamp”, were also named after him. Furthermore, some of Erwin Payr’s former assistants and senior physicians, for example, Martin Kirschner (1879-1942), Herbert Olivecrona (1891-1980), Antoni Tomasz Jurasz (1882-1961), Masao Sumita (1878-1946), Otto Kleinschmidt (1880-1948), Josef Hohlbaum (1884-1945), Paul Frangenheim (1876-1930), Heinrich Kuntzen (1893-1977), and Ernst Heller (1877-1964), in part later became extremely influential surgeons and international medical scholars. This article discusses an original historical correspondence from Payr to Emil Krückmann (1865-1944) from October 7, 1916. This original correspondence also includes a handwritten message to Arthur Brückner (1877-1975), written by an unidentifiable physician on the backside of the typewritten correspondence. The existence of this original material shows that surgery in World War I partly had a very provisional character and that the treatment of the patients could have been, at least to some extent, chaotic and not well organized with frequent changes in the physicians’ responsibility for their patients.

Key words: 20th-century history of medicine, World War I, General surgery, Neurosurgery, Orthopedic surgery

Received: 9 Aug 2023; Accepted: 14 Oct 2023; Online published: 1 Feb 2024

Research on History of Medicine/ 2024 Feb; 13(1): 3-14.

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Citation:

Suwa, B., 2024. The History of Surgery in World War I: Erwin Payr (1871 – 1946). *Res Hist Med*, 13(1), pp. 3-14.



Introduction

Erwin Payr was born on February 17, 1871, in Innsbruck (former Austrian Hungarian Empire). He was his family's only son and fourth child (Payr, 1994, pp. 1, 137, 227; Wormer, 2001, p. 148). His father Karl Payr originally had been a secretary at the Chamber of Commerce and was granted the title "professor for state economy" ("*Staatsrechnungswissenschaften*") at Innsbruck University in 1888 (Zwanowetz, 1977, p. 377; Payr, 1994, p. 2; Wormer, 2001, p. 148).

After graduating from school, Payr began to study medicine at Innsbruck University and later continued with medicine in Vienna (Jantsch, 1977, p. 377; Payr, 1994, pp. 7-15). In Innsbruck, Payr was especially impressed by the surgeon Carl Nicoladoni (1847-1902), and therefore, Nicoladoni later became Payr's most important teacher (Payr, 1994, p. 12). At Vienna University, Theodor Billroth (1829-1894), and Anton von Eiselsberg (1860-1939), can be considered Payr's academic teachers in surgery (Payr, 1994, pp. 15-17; Wormer, 2001, p. 148). After Payr passed his medical examination in 1894 (Payr, 1894; Payr, 1994, p. 18), he began his medical career as a voluntary physician in the clinic for internal medicine at Vienna University (Payr, 1994, pp. 24, 25; Wormer, 2001, p. 148) and later became Eduard Albert's (1841-1900) assistant in the year 1895 (Payr, 1994, pp. 25, 26, 227; Wormer, 2001, p. 148). In 1897, Payr first started as an assistant pathologist at Vienna University, pathological institute, assisting Anton Weichselbaum (1845-1920) (Payr, 1920, pp. 26, 27, 227). The same year, Nicoladoni asked Payr to become his first assistant at Graz University, clinic for surgery (Jantsch, 1977, p. 377; Payr, 1994, p. 28).

Payr accomplished his postdoctoral lecture qualification thesis at Graz University in 1899 (Jantsch, 1977, p. 377; Payr, 1994, p. 34). In December 1902, Carl Nicoladoni suddenly passed away, and therefore, Erwin Payr became his substitute as provisional head of Graz University, clinic for surgery, for about 6 months (Payr, 1994, p. 38, 227). In 1903, Payr had to leave Graz University; however, he stayed in the city of Graz and became a surgical practitioner (Payr, 1994, pp. 38-43, 227).

In 1907, Erwin Payr was appointed full professor for surgery at Greifswald University in Prussia/ German Empire (Payr, 1994, pp. 48-63, 227; Wormer, 2001, p. 148). After four years, he became a professor of surgery at Königsberg University, Prussia/ German Empire (today Kaliningrad/ Russian Federation) in 1910 (Payr, 1994, pp. 63-69, 227; Wormer, 2001, p. 148). Several months later, he was assigned professor at Leipzig University, Saxony / German Empire in 1911 (Payr, 1994, pp. 69, 227; Wormer, 2001, p. 148). He stayed at Leipzig University until the regular end of his career in 1937 (Payr, 1994, pp. 120-122, 227; Wormer, 2001, p. 148).

Erwin Payr, as a Saxon Military Surgeon in World War I

At the beginning of World War I, Payr became a "general physician" ("*Generalarzt*") of the 19th army corps (2nd Royal Saxon) ("*XIX. Armee –Korps (II. Königlich Sächsisches)*"), commanded by the general Maximilian von Laffert (1855-1917) (Mertens, 2007; Payr, 1994, pp. 80-82). After Payr received the order, he had to travel to Belgium by train on August 7, 1914 (Payr, 1994, p. 80).

In Belgium, Payr was assigned to a field hospital in Rethel (Payr, 1994, pp. 85-87). In accordance with many other medical reports about World War I, Erwin Payr stated that complications, like bleeding, injuries of different parts of the stomach and the guts, and injuries of the spleen and the liver, with their very bad prognoses, mainly because of shoots



in the abdomen, were very common (Payr, 1994, pp. 86, 186; Suwa, 2023, p. 215). Furthermore, Payr wrote that he used a magnetic device to remove grenade splinters from the brain (Payr, 1994, p. 86).

In December 1914, Payr treated Prince August Wilhelm, Emperor William II's fourth son. He, according to Payr's report, having crashed his automobile at high speed against a tree, was brought to the hospital with 18 bone fractures (Payr, 1994, p. 88). Emperor William II visited his son in Rethel every morning, and therefore, Payr became closely acquainted with the emperor and other members of the German royal family (Payr, 1994, p. 88). Furthermore, Payr also became closely acquainted with the King of Saxony, Friedrich August III (Payr, 1994, p. 89).

Around the spring of 1915, Erwin Payr and his whole staff were assigned to Sedan and had to leave Rethel (Payr, 1994, pp. 93-97). Payr met with surgeons like Ferdinand Sauerbruch (1875-1951) (Payr, 1994, pp. 92-93), August Bier (1861-1949) (Payr, 1994, p. 98; Suwa, 2022, pp. 233-244), or with the general staff physician, Otto von Schjerning (1853-1921) (Payr, 1994, pp. 91-100), who played a very influential role for the Prussian army in World War I.

Erwin Payr mentioned he suffered several different diseases during the time of his military duty. First Payr was treated for haemorrhoids in the year 1914 (Payr, 1994, p. 83). After escorting Prince August Wilhelm back to Berlin, Payr was badly affected by pneumonia and consecutively by severe diarrhea (Payr, 1994, p. 89). In Sedan, Erwin Payr suffered from a second episode of severe diarrhea (Payr, 1994, p. 99). Around 1943, Payr gave no evidence that he was seriously restricted by these diseases; Payr continued working by treating himself (Payr, 1994, p. 89).

Erwin Payr's Biography after World War I

After World War I, Payr continued his work as a full professor of surgery at Leipzig University (Payr, 1994, p. 100). During the era of the first German Republic (1918-1933), Saxony became one of the few political centers that were partly influenced and controlled by left-wing politicians and socialists (Payr, 1994, pp. 101-102; Sturm, 2011, pp. 26-30). Therefore, Payr extensively described the clashes between the communist paramilitary forces and the right-wing paramilitary forces which became part of everyday life in Leipzig between 1918 and 1920 (Payr, 1994, pp. 101-105).

After 1933, the Nazis first tried to dismiss Erwin Payr from office (perhaps, one reason for the early disagreements between Payr and the Nazis was the fact that Payr was an Austrian Catholic) (Kästner, 1993, p. 44; Wormer, 2001, p. 148). The Saxon government disapproved these Nazi plans (Kästner, 1993, p. 44). In the following years, Payr gradually became involved in Nazi politics and, to a certain degree, also in Nazi medical crimes (Kästner, 1993, pp. 39-50). Today, we know that Erwin Payr was responsible for forced sterilizations that were performed in Leipzig (Kästner, 1993, pp. 39-50) although concrete participation in cases of Nazi medical crimes is very difficult to prove. This is because most of the documents in connection with those crimes were destroyed around 1944 (Hinz-Wessels, et al., 2005, p. 79).

Although there seems to be no obvious evidence that Erwin Payr was a member of the Nazi Party (NSDAP), Payr definitely was a member of some of the party's sub-organizations (this was possible, at that time, to participate in the sub-organizations without becoming a party member of the NSDAP and many individuals in Germany used that

opportunity) (*Prof. Dr. med. Erwin Payr*, n.d.). A decision not to participate in the Nazi movement as a party member would have been very remarkable because most of the former chief physicians in Nazi Germany definitely became members of the Nazi Party (NSDAP).

In February 1937, Erwin Payr officially and regularly retired from his position as a full professor for surgery at Leipzig University (Payr, 1994, pp. 120-122). However, he continued to practice as a surgeon for some years (Payr, 1994, pp. 122-124).

With the beginning of World War II, Payr was appointed as “general physician” (*“Generalarzt”*), for the second time, in September 1939. In addition, he became a “consulting surgeon” (*“beratender Chirurg”*) (Payr, 1994, p. 124). At that time, Erwin Payr already was 68 years of age. Furthermore, Payr was asked to hold lectures in surgery at Leipzig University again (Payr, 1994, p. 125). Erwin Payr died on April 4, 1946, because of pneumonia as a complication of a fractured hip (Payr, 1994, pp. IX, 227).

Payr’s most famous former assistants were Martin Kirschner (1879-1942) (for example, the Kirschner wires for osteosynthesis are named after him) (Hörmann, 2000; Michler, 1977, p. 676; Payr, 1994, p. 168), Herbert Olivecrona (1891-1980) (the very influential Swedish neurosurgeon) (Ljunggren, 1998, pp. 142-149; Payr, 1994, pp. 100, 172), Antoni Tomasz Jurasz (1882-1961), Poznań and Edinburgh University (Magowska, 2011, pp. 2167-2171; Payr, 1994, pp. 66, 67, 73, 169, 170), and Masao Sumita (1878-1946), Kyushu University, Japan (Kobayashi, 1999, pp. 563-584; Payr, 1994, p. 170). Otto Kleinschmidt (1880-1948), Josef Hohlbaum (1884-1945), Paul Frangenheim (1876-1930), Heinrich Kuntzen (1893-1977), and Ernst Heller (1877-1964), were some of Payr’s other notable former assistants (Payr, 1994).

Furthermore, Payr mentions that several of his former assistants (at least five from Turkey, three from Bulgaria, and two from Greece) returned to their home countries after their surgical apprenticeship (Payr, 1994, p. 172). Therefore, it becomes obvious that Erwin Payr also had a certain influence on the development of surgical science in these countries.

Altogether Erwin Payr can be regarded as one of the most influential surgeons of his time (Wormer, 2001, p. 148). The different Payr’s signs of clinical medicine were named after Erwin Payr (Wormer, 2001, p. 148): Payr’s sign (angiology): A sign (pain of the foot’s sole after pressure on the medial foot’s sole) indicating thrombophlebitis (Payr, 1930, pp. 961-979); Payr’s sign (orthopedics/ knee): A sign (pain of the knee articulation’s medial part after pressure from above on the knee while the patient sits cross-legged) indicating injuries of the medial meniscus (Payr, 1936, pp. 976-980). Payr’s sign (orthopedics/ spine): A sign (pain of the lumbal spine after side-flexion to the fracture’s counter lateral side) indicating fracture(s) of the lumbal spine’s processus transversus (Payr, 1920, pp. 649-650). Furthermore, Payr invented a significant number of surgical instruments that were named after him, including the “Payr pylorus clamp” (Wormer, 2001, p. 148). “Payr’s disease” is a synonym for splenic–flexure syndrome or irritable bowel syndrome and was described by Erwin Payr (Jantsch, 1977, p. 377).

Emil Krückmann (1865-1944)

Emil Krückmann was born in Neukloster/ Prussia on May 14, 1865 (*Prof. Dr. med. Emil Krückmann*, n.d.). He studied medicine at the universities of Munich, Berlin, Rostock, and Göttingen (*Prof. Dr. med. Emil Krückmann*, n.d.). In 1889, Emil Krückmann graduated from Rostock and completed his doctoral thesis at Leipzig University one year later (*Prof. Dr. med. Emil Krückmann*, n.d.). Around that time, he also was a general



practitioner (*'Prof. Dr. med. Emil Krückmann'*, n.d.). Krückmann became Rudolf Berlin's (1833-1897) assistant in the hospital for ophthalmology at Rostock University from 1891 to 1894 (*'Prof. Dr. med. Emil Krückmann'*, n.d.; Pagel, 1902, p. 390). Consecutively, he switched to Leipzig University and became Hubert Sattler's (1844-1928) assistant from 1895 until 1897 (*'Prof. Dr. med. Emil Krückmann'*, n.d.; Lauber, 1988, p. 435). He completed his postdoctoral lecture qualification in 1896 and was assigned to associate professor at Leipzig University in 1901 (*'Prof. Dr. med. Emil Krückmann'*, n.d.). In 1907, Emil Krückmann was appointed to full professor at Königsberg University/ Prussia, German Empire (today Kaliningrad/ Russian Federation) (*'Prof. Dr. med. Emil Krückmann'*, n.d.). Therefore, we can assume that Emil Krückmann and Erwin Payr perhaps were acquainted with each other at Königsberg University (*'Prof. Dr. med. Emil Krückmann'*, n.d.). Five years later, Emil Krückmann became a professor at Berlin University in 1912 and held that position until he retired in 1934 (*'Prof. Dr. med. Emil Krückmann'*, n.d.). Emil Krückmann passed away on June 23, 1944 in Berlin (*'Prof. Dr. med. Emil Krückmann'*, n.d.).

Arthur Brückner (1877-1975)

Arthur Brückner was born in Dorpat (formerly the Russian Empire, today Tartu in Estonia) on August 24, 1877 (*Deutsche Nationalbibliothek* (German National Library), 2023; *Spektrum; Lexikon der Biologie*, 2023). Arthur Brückner's father, Alexander Brückner, (1834-1896) was appointed to professor for history at Dorpat University (primarily a German language university between 1802 and 1893) in 1872 (Hausmann, 1910, pp. 688-691). In 1910, Arthur Brückner was appointed to Königsberg University (formerly Prussia/ Germany, today Kaliningrad/ Russian Federation) (*Spektrum; Lexikon der Biologie*, 2023). Therefore, it is reasonable to assume that Brückner had a close relationship with Emil Krückmann and probably also with Berlin University's Clinic for Ophthalmology around October 1916 (*'Prof. Dr. med. Emil Krückmann'*, n.d.; *Spektrum; Lexikon der Biologie*, 2023). Consecutively, Brückner was appointed to Jena University (*Spektrum; Lexikon der Biologie*, 2023). In 1923, Arthur Brückner was appointed as a full professor of ophthalmology at Basel University in Switzerland (*Deutsche Nationalbibliothek* (German National Library), 2023; *Spektrum; Lexikon der Biologie*, 2023). Ewald Hering (1834-1918) can be regarded Arthur Brückner's most important teacher and therefore, sensory physiology played a major role in Brückner's scientific work (Trincker, 1969, pp. 617-619). Brückner also published notable textbooks in the field of ophthalmology (*Deutsche Nationalbibliothek* (German National Library), 2023; Brückner, 1929; Brückner and Amsler, 1961). Arthur Brückner passed away in Basel/ Switzerland on March 29, 1975 (*Spektrum; Lexikon der Biologie*, 2023).

Materials and Methods

The main material discussed in this study is Erwin Payr's typewritten correspondence to Emil Krückmann with the date October 7, 1916. Additionally, there is a handwritten message from an unidentifiable physician to Arthur Brückner on the backside of that correspondence.

The document analysis method in qualitative research was used in this study. German transcripts of the correspondences were prepared by identifying each word and character of the handwritten texts. Some words were not easy to identify exactly although it was possible to work out the transcripts. Successively, the transcripts were carefully translated into

English. The contents of the correspondences were analyzed by comparing them with different sources. Step by step, the historical context of the correspondences was highlighted and discussed, resulting in overviews of the discussed topics.

The original material discussed in this study was archived together with the previously discussed original materials and with other related supplementary materials at Vienna Medical University (Manuscript No. MUW-AS-007005-0010, 2024):

*Archivaliensammlung
Josephinum – Medizinische Sammlungen GmbH
Medizinische Universität Wien
Währinger Straße 25
1090 Wien (Vienna) Austria*

This study is partly based on Erwin Payr's autobiography, written around 1943 (Payr, 1994). As already mentioned, Payr passed away shortly after World War II in 1946. Therefore, the manuscript was not published until E. Payr's grandson, Dr. Med. J. Krebs prepared the whole manuscript for publication in 1994. However, in 1946, many parts of Payr's manuscript (that can be considered the basis of his autobiography) were still "far away" from being publishable for different reasons (especially because of political reasons) (Payr, 1994, pp. VI-X). It is important to consider that Erwin Payr was approximately 72 years of age when he wrote the manuscript around 1943. If we consider that his autobiography does not show apparent inconsistencies, the reliability of that source can be estimated as "sufficiently reliable" although several exceptions have to be mentioned. For example, Erwin Payr was involved in urgent surgical operations and partly faced dangerous situations, especially during World War I. Therefore, his report about World War I could contain certain inaccuracies and as a consequence, it was important to find other sources that also reported these or similar events. The following sources were compared to Payr's autobiography (Payr, 1994) in detail:

1. August Bier's biography (Vogeler, 1941)
2. Anton von Eiselsberg's autobiography (Eiselsberg, 1937)
3. Ferdinand Sauerbruch's biography (Eckart, 2016)

Results

Typewritten correspondence from Erwin Payr to Emil Krückmann from October 7, 1916 (Figure 1) [explanations and comments were added in square brackets]:

Dear Colleague Krückmann!

I examined Ms. Lässig in detail. It's a congenital luxation of the hip [CDH]. The former position of the caput femuris inside the artificial acetabulum above the normal articulation was very advantageous. But this spring, a change occurred inside that articulation. It became painful and the leg began to show a tendency to rotate medially. I wouldn't endorse a surgical operation now because a special construction of braces, when made accurately, could probably convert the articulation back into the former satisfying position which was the case for so many years.

If that shouldn't be successful, I would endorse a surgical operation with a good prognosis. Unfortunately, it will become very difficult to make this special construction of braces because all the specialists in braces and bandages were conscripted for military duty.



GEH. MED.-RAT PROF. DR. PAYR
DIREKTOR DER KGL. CHIRURG. KLINIK

LEIPZIG, DEN 7. Oktober 1916.
MOZARTSTR. 7.

Lieber Kollege Krückmann!

Fräulein Lässig habe ich genau untersucht. Es handelt sich um eine congen. Hüftluxation mit ungewöhnlich guter Stellung des Kopfes in einer neugebildeten Pfanne oberhalb der normalen. Im Frühjahr dieses Jahres hat sich aber an diesem neuen Gelenk etwas geändert. Es ist schmerzhaft geworden und hat das Bein eine Neigung zur Einwärtsrotation erhalten. Ich bin vor der Hand noch nicht für eine Operation, da durch einen gut gebauten Schienenhülsenapparat wahrscheinlich das Gelenk wieder in den befriedigenden Zustand zurückgeführt werden kann, in dem es durch so viele Jahre sich befand.

Erst wenn diese Maßnahme versagen sollte, bin ich für eine Operation, die keine ungünstigen Aussichten hat. Leider stellen sich der Beschaffung des Apparates Schwierigkeiten entgegen, da alle gelernten Bandagenarbeiter eingezogen sind.

Ich bin seit Anfang Sept) wieder nach 2jähr. Tätigkeit im Felde (mit vielen mehrfach schweren ^{u. A. Pneumoniae} Erkrankungen) daheim und habe am 1. Oktober die Leitung meiner total atrophischen Klinik übernommen. Ich bin in den 2 Jahren draußen um 10 gealtert und fühle mich höllisch kaput und abgearbeitet. Hoffentlich geht es Ihnen besser als mir.

Mit schönsten Empfehlungen an die verehrte Frau Gemahlin und ebensolchen Grüßen an Sie bin ich

Jhr alter

E. Payr

Figure 1. Erwin Payr's typewritten correspondence to Emil Krückmann from October 7, 1916. Vienna Medical University (Manuscript No. MUW-AS-007005-0010, 2024)

After 2 years of duty near the battlefields (I suffered from multiple severe diseases myself) [handwritten above the typewritten text: E. g. pneumonia] I've been back home since the beginning of September and returned to my position as chief physician of my totally atrophic hospital on October 1st. I've aged 10 years during these two years of military duty, and feel tired and overworked like hell. Hopefully, you are in a better condition.

Please pass the most beautiful greetings on to your wife.

Your old

E. Payr

The handwritten message from an unidentifiable physician to Arthur Brückner on the backside of Payr’s correspondence (Figure 2):

Dear Colleague Brückner,

You will have received my telegram. Tomorrow morning, I will begin my journey, traveling through Munich and Baden–Baden. I will also stay half a day in Freiburg and will have two stays in Frankfurt and Marburg. Perhaps, I will ask to send everything to Frankfurt, addressed to Prof. Schnaudigel, Sgrigneustr. The posters have to be prepared in the meantime. A beautiful time,

Your colleague

Wunderbitte [or similar]

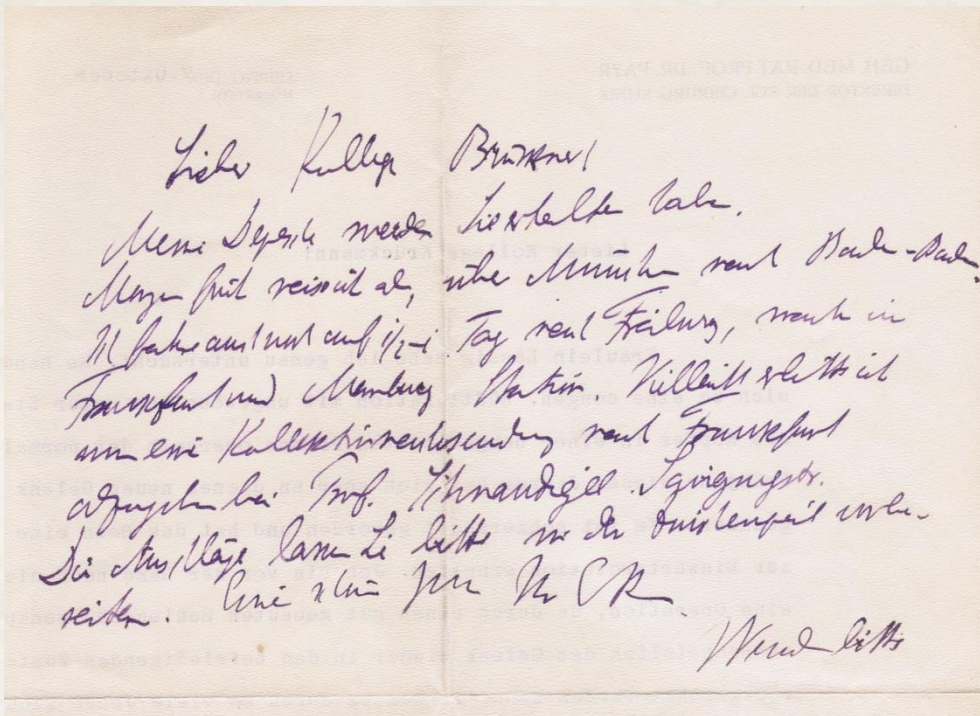


Figure 2. Handwritten message, addressed to Arthur Brückner on the backside of Erwin Payr’s typewritten correspondence to Emil Krückmann from October 7, 1916. Vienna Medical University (Manuscript No. MUW-AS-007005-0010, 2024)

Discussion

In the spring of 1916, Erwin Payr returned to his position as a full professor for surgery at Leipzig University (Payr, 1994, p. 100). Therefore, Payr’s correspondence has to be chronologically sorted approximately half a year after his return to his office at Leipzig University (In contrast to his correspondence from October 7, 1916, Payr writes in his autobiography that he already returned to Leipzig in Spring 1916 (Payr, 1994, p. 99; Figure 1)). It is remarkable that even half a year after his return from the front, Payr reports about the psychological effects of his military duty: ... that he feels he had aged 10 years in the two years he served near the western front and that he feels “tired and overworked like hell” (“*Ich bin in den 2 Jahren draußen um 10 gealtert und fühle mich höllisch kaput und abgearbeitet.*”) (Figure 1). Two possible explanations can be given for the apparent fact



that there is an inconsistency between the time Payr wrote in the manuscript for his autobiography around 1943 about his return from the front and the date Payr wrote he returned to his position at Leipzig University in his correspondence from October 7, 1916:

1. Apparently, Payr stated both in his correspondence from October 7, 1916, and in the manuscript for his autobiography (Payr, 1994, pp. 83, 89, 99) that he had suffered multiple diseases during his military duty in World War I. Therefore, he could have used the time to physically (and perhaps also psychologically) recover from his military duty before he returned to his position as a full professor at Leipzig University.

2. Erwin Payr stated in the manuscript for his autobiography that he had collected drawings (of surgical operations) and other scientifically interesting materials during his time near the front (Payr, 1994, p. 100). Therefore, Payr, after his return to Leipzig, could have spent approximately 6 months preparing manuscripts for some of his scientific publications that were later published.

The so-called ‘*franc tireurs*’

Erwin Payr’s experiences with the so-called ‘*franc tireurs*’ (irregular Belgian fighters who were believed to be part of a broad civil uprising by the Germans) are especially interesting (Payr, 1994, pp. 81-82). The so-called ‘*franc tireurs*’ in many ways could have had a major influence on the World War because they were successful in slowing the progress of the German army while advancing through Belgium (Lipkes, 2007; Zuckerman, 2004, pp. 5-61). Payr wrote that the trees along the streets were partly chopped to make obstacles of the trunks and branches standing in the way of German armies advancing towards France (Payr, 1994, p. 81). Erwin Payr also describes a situation where his unit was taken under fire in a Belgian valley from the forest that surrounded both sides of the street (Payr, 1994, p. 82). It is especially remarkable that Payr wrote it caused no casualties to the unit whatsoever. (Payr, 1994, p. 82). Therefore, we can assume that the so-called ‘*franc tireurs*’ did not shoot at the German soldiers but possibly only fired warning shots or did shoot at the wagons or at the horses drawing the wagons to slow the progress of the German armies (Lipkes, 2007; Zuckerman, 2004, pp. 32-35). It could be another indication that the so-called ‘*franc tireurs*’ in fact only wanted to slow the progress of the German army and should not be considered real partisans (the German Empire’s propaganda regularly described the ‘*franc tireurs*’ as dangerous partisans and as part of a broad civil uprising in Belgium) (Lipkes, 2007, pp. 543-574; Zuckerman, 2004, pp. 55-61). Erwin Payr stated the ‘*franc tireurs*’ often had been former Belgian soldiers who threw away their uniforms and continued their resistance against the German armies as civilians (Payr, 1994, p. 82). Today, we know the German armies completely overreacted to that form of resistance and murdered thousands of Belgian civilians in response (Lipkes, 2007, pp. 543-574; Zuckerman, 2004, pp. 55-61). Surprisingly, Erwin Payr also mentions the massacre of Dinant, writing that “far over 100” (“*weit über 100*”) were shot to death (Payr, 1994, p. 82). In fact, around 674 civilians (Zuckerman, 2004, p. 30) or even 685 civilians (Lipkes, 2007, pp. 257-378) were murdered in Dinant on August 23, 1914, by the 23rd Saxon division and parts of the 32nd division of the 3rd German army. It is important to consider that Erwin Payr wrote the manuscript for his autobiography during the time of World War II around 1943 (Payr, 1994, p. IX). Therefore, we can assume that the political circumstances certainly did influence Erwin Payr’s writing and the way he described his own biography.



Payr's Correspondence from October 7, 1916

One of the interesting aspects of this correspondence is that the civilian medical system suffered enormously from World War I in Germany. Payr describes that all “specialists in braces and bandages” (“*Bandagearbeiter*”) were conscripted for military duty and therefore, “Ms. Lässig” obviously could not be treated properly (Figure 1). Although an early CDH diagnosis was difficult to make without ultrasound, different forms of conservative and surgical treatment of CDH already existed at the time around World War I (Hoffa, 1898).

The existence of the handwritten message to Arthur Brückner on the backside of the typewritten correspondence clearly indicates that the medical treatment of civilians in World War I was partly chaotic and the responsibility of the physicians for their civilian patients seemed to have changed frequently (Figure 2). Organizing these civilian treatments could have been very difficult, for example, due to the conscriptions of physicians. Another reason why the message to Brückner could have been written on the backside of Payr's correspondence is the shortage of paper, especially of high-quality paper, around the year 1916 (*Der Papiermangel; Errichtung einer Berliner Reichsstelle für Zeitungsdruckpapier*, 1916, p. 11).

Conclusion

This material shows that medical treatment during World War I partly was very provisional and that especially civilian patients could have suffered severely from these circumstances. The handwritten message on the backside could show that the responsibility of the physicians for their patients could have frequently changed, partly because many physicians had to fulfill their duty near the front lines.

Funding

I received approximately 180.000 € for 6 years (2020-2025) from the ‘Association of Statutory Health Insurance Companies and Mandated Physicians in Saxony-Anhalt / Germany’ (*Kassenärztliche Vereinigung Sachsen-Anhalt*) in connection with my physician's practice in Wanzleben OT Hohendodeleben.

Conflict of Interest

None.

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