

### LESS-KNOWN ASPECTS OF LUDWIK FLECK'S HEROIC LIFE DURING THE SECOND WORLD WAR

To the Editor:

Although recognized mainly as a prominent philosopher, Ludwik Fleck was also a specialist in microbiology, serology and immunology. His life and scientific legacy have been discussed widely in various publications [1], but some aspects require clarification, especially his contribution to research on the anti-typhus vaccine during his imprisonment in Auschwitz-Birkenau and Buchenwald. In an attempt to depict the work of Ludwik Fleck, we turned to original sources housed in the Archives of the Auschwitz-Birkenau State Museum, especially documentation connected with the SS and Police Hygiene Institute in Auschwitz (Auschwitz is the German name for Oświęcim) [2-4].

At the beginning of February 1943, Fleck and his assistants were arrested and imprisoned in Łąckiego Street in Lwów (Lviv). A week later they were deported to the Auschwitz concentration camp. This group of scientists, together with their families, arrived at Auschwitz on 7 February 1943. The entire "Lvov group" was placed in the main camp (KL Auschwitz I) and on 11 February were given prisoners' numbers. Fleck was given the number 100967 and was placed in barrack No. 20 together with his son Richard (No. 100966). According to author Langbein, Fleck was later moved to block 10, to be with his family – "an unusual exception" – as Langbein wrote in his letter to Thomas Schnelle. His wife Ernestyna was given the number 34967 and was assigned to barrack No. 10. This block was completely isolated and mainly designed for women.

At first, Fleck worked as a caretaker (*Pfleger*) in block 20, which served as a camp hospital for inmates. After a short time he and his son became infected with typhus but their illness lasted only 7 days and was relatively mild. Fleck managed to hide his illness (as well as his son's) and

was able to work. From March 27, Fleck as well as his assistants were assigned to work in the Hygiene Institute of the Waffen-SS. Fleck worked in the camp laboratory (*Untersuchungsstelle*) in block 10 conducting bacteriological studies for the inmates (routine analyses of blood and urine). In May 1943 the institute was relocated to the new building in the village of Rajsko, not far from the main camp. Fleck was assigned to work in the "Wassermann station" (room) situated on the second floor in the new building in Rajsko. According to Dr. Anna Seeman, who worked in the Walery-Rose Laboratory in the same building, it was Fleck's task to diagnose syphilis, typhus and other illnesses using serological tests such as the Wassermann, Weil-Felix and Gruber-Widal tests.

In January 1944 Fleck was transferred to Buchenwald at the command of the SS-WSHA. There, a group of 65 prisoners – scientists and physicians of various nationalities – were selected to operate the anti-typhus vaccine production. The inmates of block 50 also performed, unwillingly, routine laboratory tests on the blood of victims of Ding Schuler's experiments (Schuler was director of the Hygiene Institute in Buchenwald). It is highly probable that Fleck and other prisoners of block 50 were forced to perform the Weil-Felix test and possibly other laboratory tests with sera from people deliberately infected with virulent strains of typhus. Fleck and other prisoners who worked in block 50 at Buchenwald, including Dr. Marian Ciepielowski and Prof. Dr Robert Waitz, also falsified the laboratory results to save prisoners' lives.

Although Fleck had a 'privileged' life in the camp, he participated in the sabotage activities organized by the camp's resistance. Firstly, he discovered that the anti-typhus vaccine being produced for the Wehrmacht was ineffective. He did not divulge this finding but began to produce a small quantity of an effective vaccine, which he and his colleagues secretly made for their own use (i.e., for the prisoners) and for control tests.

Buchenwald was liberated on 11 April 1945 by the American Army. After 3 months in hospital, first in Buchenwald and then in Bolesławiec, Fleck returned to Lwów in July 1945. He found his wife and son and they left for Lublin.

When considering Fleck's contribution to research on the anti-typhus vaccine during his imprisonment in the concentration camps, we note that Fleck worked in the camp laboratories in Auschwitz and Buchenwald, performing bacteriological studies and serological tests for the inmates only. Though Fleck was also involved in the sabotage activities during his incarceration in Buchenwald and helped to produce a small quantity of an effective anti-typhus vaccine, he was never selected to work on the anti-typhus vaccine.

**Andrzej Grzybowski MD PhD<sup>1,2</sup> and  
Maria Ciesielska MD PhD<sup>3</sup>**

<sup>1</sup>Dept. of Ophthalmology, Poznan City Hospital, Poznań, <sup>2</sup>Dept. of Ophthalmology, University of Warmia and Mazury, Olsztyn, and <sup>3</sup>Communal Health Center, Zielonka, Poland

#### References

- Weisz GM, Grzybowski A. Medical discoveries in the ghettos: the anti-typhus battle. *IMAJ Isr Med Assoc J* 2011; 13: 261-5.
- Auschwitz-Birkenau State Museum Archives. Documents of SS and Police Hygiene Institute in Oświęcim.
- Auschwitz-Birkenau State Museum Archives. A list of prisoner workgroups from Untersuchungsstelle, Auschwitz.
- Auschwitz-Birkenau State Museum Archives. Pages from Block 20 register and RTG register (camp hospital). A list of newcomers from 7 Feb 1943 (D-AuL-5/1). Ludwik Fleck is registered as a new prisoner with the number 100967.

#### Erratum

In the list of contents in the October issue of IMAJ (Vol. 14 no. 10) a mistake occurred in the order of the authors of the article:

"Why do geriatric patients attend otolaryngology emergency rooms?"  
E. Dagan, L. Migirov and M. Wolf

The correct order of the authors should be:  
E. Dagan, M. Wolf and L. Migirov