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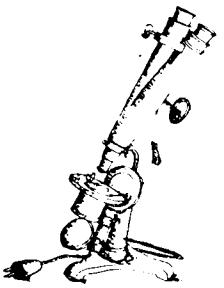
Dermatopathology in Historical Perspective

D. Friday King, Editor



Jakob Erdheim

Eminent Pathologist of Vienna

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Jakob Erdheim, eccentric and skilled, was one of the best-known pathologists of the first half of the twentieth century (Fig. 1). Erdheim was a popular university professor and his students carried his teaching far beyond Austria. As a scientist, his contributions to research were significant; as a clinician, he performed many of Vienna's autopsies and examined the surgical specimens removed from the rich and famous of his time.

Erdheim, born in 1874 in Galicia, then a province of Austria (it is in southern Poland today), received his medical degree in 1900. Soon afterward he joined the Pathology Institute of one of Vienna's municipal hospitals (Fig. 2) and, in relatively short time, was promoted to professor. By 1923 he was appointed director of the institution (Leo Low-Beer, personal communication, 1984). While Director, Erdheim personally conducted or had some hand in the approximately 2,500 autopsies performed here annually. If the actual dissection was done in the morning by a medical assistant, Erdheim examined the organs and dictated notes on his findings at noon (1). Particularly interesting cases were demonstrated three times a week to physicians, mostly Americans, visiting the Institute (Irving Shapiro, personal communication, 1982). Erdheim chose to speak in German to these people although he is remembered as being fluent in English.

Erdheim was meticulous in his examination of surgical specimens. He spoke frequently with the surgeons who sent tissue for his assessment because, as he explained, he preferred not to have to work in a clinical vacuum "behind the paraffin curtain."

Demanding nothing less than perfection, Erdheim tolerated neither technicians nor secretaries in his laboratory. He typed his own papers and reports and encouraged his medical staff to do the same, which they did unless they could terrorize a subordinate into doing the task for them. The quiet

FIG. 1. Erdheim in Vienna Municipal Hospital's morgue. He is shown wearing an apron and cotton gloves over rubber gloves.

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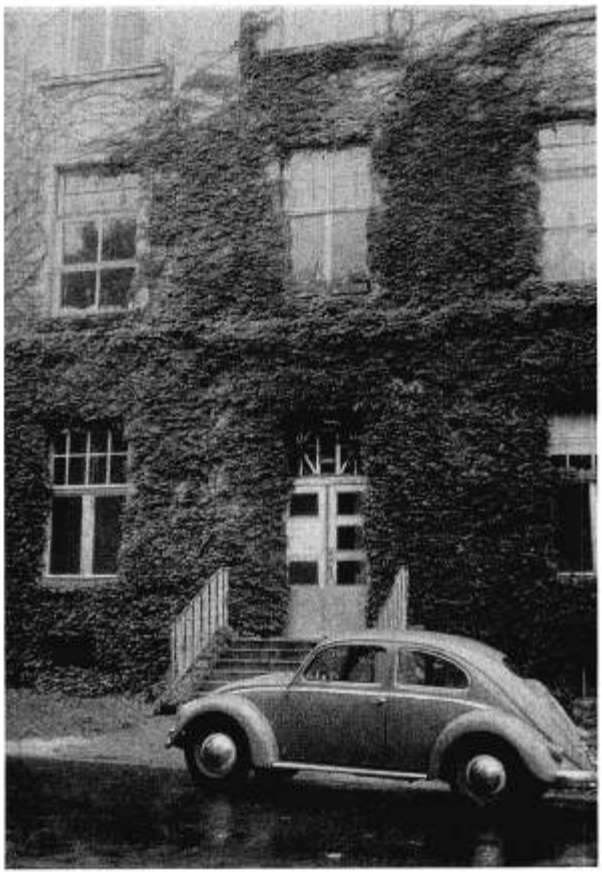

FIG. 2. Pathology Institute of Vienna Municipal Hospital.

of Erdheim's laboratory was often disturbed by the sound of the single histology technician feuding with his employer.

Erdheim was a devoted, effective teacher, and well-liked by medical students as well as graduate physicians (1). In a high-pitched, thin voice that contrasted oddly with his great height, he delivered lectures to an attentive audience (Helen Schur, personal communication, 1981). He evidently never forgot that, as a young man, he had been refused the opportunity to study pathology with Carl Sternberg, the famous pathologist after whom the Reed-Sternberg cells of Hodgkin's disease were named. After this painful experience, Erdheim vowed never to deny education to anyone who wished to study with him.

Erdheim employed several assistants with whom he was on cordial but distant terms. They addressed each other by their professional titles; it would have been unheard of to be on a first-name basis. Their friendly relations, however, came to an abrupt end if the assistant committed even the slightest error in technique while doing an autopsy or preparing a specimen (Leo Low-Beer, personal communication, 1984).

During autopsies, Erdheim would comment on the work at hand, explaining the intricacies of his findings to his observers. He would also, at times, speak about his interest in subjects as varied as travel, history, and the natural sciences. He shared his experiences in World War I as field commander of a mobile pathology laboratory where he dissected corpses while standing in the Balkan snow listening to the sound of gunfire (Helen Schur, personal communication, 1981).

After training, many of his assistants went on to practice their profession outside of Austria. Heinrich Karplus served as chief medical examiner in Tel Aviv; Fritz Schajowicz, an expert in bone pathology, worked in Buenos Aires.

Leo Low-Beer (Fig. 3), who later became a pathologist in Oklahoma, was Erdheim's assistant from 1929 to 1932. He performed autopsies, examined surgical specimens, and conducted bacteriological studies that he reviewed with Erdheim each morning. At nine every evening Low-Beer met with Erdheim to discuss the remainder of his daily work, a demanding routine followed seven days a week. Low-Beer was responsible for postmortem exami-

FIG. 3. Leo Low-Beer, Erdheim's assistant, 1930.

nations in Vienna's three children's hospitals (most pediatric deaths of that time resulted from tuberculous meningitis, miliary tuberculosis, or rheumatic pancarditis).

Although Erdheim was undemonstrative to those who worked under him, he occasionally showed his warmth. Low-Beer engaged in competitive skiing. Once, after returning from several days in the mountains, he learned that Erdheim had secretly checked with the hospital gatekeeper to be sure that Low-Beer had suffered no injury (Fig. 4) (Leo Low-Beer, personal communication, 1984).

Nevertheless, Erdheim's students were fortunate: Their careers often flourished as a result of Erdheim's generosity. Their names appeared as senior author on papers published in scientific journals, even though Erdheim himself wrote every word of these papers, including the legends for the accompanying illustrations. Anyone reading the publications issuing from Erdheim's laboratory could tell that they were not the work of a novice, yet Erdheim was cited only inconspicuously as the director of the institute where the work was done and never as senior scientist. For his efforts, Erdheim was never reimbursed by the students, the hospital, or the university. And unlike many other Central European professors, he did not charge his students for his tutelage (1).

Erdheim's scientific papers were substantial in content, commanding the respect of his peers. He focused his attention on bone pathology and the anatomic manifestations of glandular disease (2–5). In a monograph read to the Academy of Sciences, he explained the role of the parathyroids in the growth of bones and teeth. In 1906 he read a paper to the Vienna Medical Association, identifying the onset of tetany as a consequence of removal of these important structures (6).

Erdheim addressed other endocrinologic abnormalities. He was the first to describe changes in the pituitary gland caused by pregnancy. In his catalog of pituitary tumors, he attributed the cause of Paltauf's Dwarfism to a tumor of the pituitary stalk and proved that this condition could be modified by the administration of growth hormone (7). And in collaboration with laryngologist Oscar Hirsch, he developed the transnasal approach to surgical extirpation of pituitary tumors (7,8).

To supplement his modest income, Erdheim examined the surgical specimens of private patients (1). Surely his most notable client was Sigmund Freud. In 1926 Freud had a large squamous cell cancer removed from his palate, cheek, and mandible. When the question of tumor recurrence arose, Freud's surgeon biopsied suspicious areas in his mouth on 25 occasions during the next 16 years, each time sending the tissue for Erdheim's appraisal (10). Erdheim attributed Freud's cancer to his cigar smoking—"Tabacabusis" (11)—a possibility dismissed by his patient, who is said to have merely "shrugged his shoulders at Erdheim's nicotine sentence."

On two occasions Erdheim himself was hospitalized: once for tuberculosis—an illness he went to great lengths to conceal—and on another occasion for typhoid fever. During one period of hospitalization, a student brought some slides of pathological specimens for Erdheim's review. Turning to the

FIG. 4. Postal card from Erdheim to Low-Beer sent from Naples, Italy, in 1931. It reads: "Today I went up Mount Vesuvius. In two days I am going to Pompeii; on October 1st I hope to be in Merans . . . I always return to the hotel dead tired."

student, Erdheim asked if he knew to whom the preserved and stained tissue belonged. The student did not. "It comes from the mouth of Professor Freud," Erdheim explained. "If that man doesn't stop smoking, he is going to die of cancer" (1). Erdheim's prophecy came to pass 16 years after his initial diagnosis.

Erdheim's life style was monastic. He lived in modest rooms at his hospital, devoting 16 hours a day, every day except Sunday afternoons, to his work (Helen Schur, personal communication, 1981). He was, however, not oblivious to his shortcomings as social being. When Erdheim learned that the pathologist Karl Albert Ludwig Aschoff, whom he held in great esteem, played tennis as a respite from afternoon work, Erdheim, to emulate his peer, acquired a croquet set, encouraging his colleagues to join his game. His interest in this activity was, predictably, short-lived.

Erdheim tackled his rare vacations with the same intensity he exhibited in his work (Fig. 5). Before visiting Rome he systematically learned all he could about the city, taking two years to complete his preparatory reading. As a tourist armed with copious facts, he felt compelled to leave no inch of Roman ground unexplored. "A German tourist spoke to me in the Forum," he related, "and asked me where he was. Of course, I told him not only about the Forum, but gave him the complete history of the very stone on which he stood." At the trip's end, Erdheim required a week's recuperation in a sanatorium before he was rested sufficiently to return to work (1).

FIG. 5. Erdheim in a rare moment of relaxation at a picnic in Lainzer Tiergarten, 1930.

Erdheim's department of pathology was managed in unconventional fashion. The financial arrangements were unorthodox: the cost of special studies, supplies, even the salary of the man who prepared the laboratory's corpses for autopsy were covered by payments from medical journals for those articles whose authorship Erdheim was so reluctant to acknowledge. He kept the financial resources of his department in an old cigar box locked in the clothes closet in his office. Having so few worldly needs, he was therefore quite content with the insignificant sum of money earned from his private practice (1).

It was said that Erdheim refrained from eating eggs because of their high cholesterol content. Unfortunately, his precautions against atherosclerosis were insufficient. After a long and arduous day's work, Erdheim was found in his hospital room dead of heart disease, the existence of which he had long chosen to deny.

His autopsy confirmed the cause of death: a fresh thrombus had occluded the left coronary artery. Erdheim had suffered from angina but preferred to blame his chest pain on his old tuberculosis. Whereas in the past his diagnoses had invariably been accurate, the cause of his own death had to be correctly determined by another pathologist (Leo Low-Beer, personal communication, 1981). □

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