

HISTORY OF PATHOLOGICAL ANATOMY IN HRADEC KRÁLOVÉ

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One of the three founders of pathological anatomy as a separate medical branch, Karl Rokitansky, was born in our city in the year 1804. Nevertheless, he had no relation to our department.

The pathological anatomical activity in Hradec Králové started as lately as 28 years old doctor of medicine Antonín Fingerland came to our city in the year 1928 when at the occasion of the tenth anniversary of our Republic Independence a new hospital was just being opened. Doctor Fingerland, who had been a disciple of professors Hlava and Šikl, was appointed as both the senior dissector and the head of infectious diseases department. For many years he had been working completely alone but had never forgotten the publication activities. At the very beginning he used to compile regular annual reports of pathological department, enriched by analysis of autopsies. Later on, in the thirties, this allowed him on his own material to elucidate changes in some mortal diseases frequencies. At his own expenses he passed the holidays stay in histological laboratory of professor Masson in Paris, and the next year the bacteriological course in Pasteur's Institute. After coming back doctor Fingerland introduced BWR test, using **flint stone** liver obtained in dissection room as antigen. At the same time in the pathology lab he was performing basic bacteriological, biochemical and haematological tests for the whole hospital. Only one year after it the biopsy samples started to be examined in Hlava's institute in Prague, he arranged for the same service in Hradec Králové, too. It was in the year 1929. Doctor Fingerland in his far-sighted way also took care of the quality of laboratory tests performed. In the year 1934 he engaged 14 years old Růženka Rohoznická as a charwoman. Within the years he educated her as a legendary laboratory technician who for long decades became the guarantee of an outstanding histological technique. Still before the war the senior consultant Fingerland exploited his above mentioned reports for the piece of knowledge concerning the ever increasing number of deaths due to the pulmonary cancer and its relevance to cigarettes smoking that had widely spread among the population after the First World War.

It is impossible to pass without notice Fingerland's share in organizing the medical life within the East Bohemian Medical Region and, above all, his pioneer achievement - starting with the regular medical meetings where also some interesting casuistic communications - so called „little pearls“ - were given an account of.

During the war-time he arranged for two medical students of at then time closed Czech universities - Josef Vaněk and Vladimír Vortel - to work as lab technicians with famous pathologist professor Hamperl at the German Medical School in Prague, that was not affected by closing the Czech universities and went on in its functioning. After the war both persons mentioned became outstanding professors of pathology.

At the very end of the war at the Fingerland's laboratory there was determined the spotted typhus as a cause of deaths of prisoners from Terezín concentration camp who worked together with labour commando in the near-by village Libčany. There cannot be a trace of doubt how valuable was this diagnosis stating for taking the proper epidemiological measures. After the war in 1945 the senior consultant Fingerland habilitated by his work concerning Bodian's method for impregnating the granules in cells of glomus caroticum and in tumour cells derived from it. He was appointed to the head of Pathological Anatomical Institute in newly established Medical Faculty of Charles University in Hradec Králové. He also personally took part in creating this school. Since the year 1946 he became a professor. In the year 1948 he succeeded in constructing the new lecture hall in addition to the dissection lab building. Under the guidance of professor Fingerland our institute aimed its activities not only on the lecturing and health practice but also on research tasks. This was orientated, as opposed to other pathological anatomical institutions, on aetiological pathology of bacterial, mycotic and virus diseases, also thanks to the help of his co-workers, namely doctors Vortel and Herout. Professor Fingerland returned once again to the problems of smoking, that he intuitively looked into before the war, but this time in the exact, by numbers well founded research.

From Fingerland's interest in aetiological pathogenesis there arose some publications of absolute priority. Let us remind at least his (with cooperation with Vortel and Endrys) first description of herpetic oesophagitis, as well as his interpretation of stratified tuberculomas pathogenesis. Of great value there was also his observation (the fourth one world-wide) of herpetic encephalitis.

From Vortel' publications there are worth mentioning the priority of Proteus encephalitis in new-borns, as well as the very valuable work concerning the pathology of BCG vaccination. The later Herout's priority paper dealing with herpetic tracheitis and pneumonitis had also its origin from this complex. From other themes we should mention works devoted to nocardiosis, listeriosis, cryptococcosis, adenovirus infections and observations of atypical manifestations of tuberculosis in patients after transplantations. From the year 1963 there originate two, at that time very important, communications about Reye's syndrome from Dvořáčková, Vortel and Hroch.

One of the aetiologically directed activities paid an interest even a quarter of a century later. In sixties professor Vortel was engaged in problems of syphilitic lymphadenitis and by that time he introduced very demanding, nevertheless reliable method of silvering by Warthin-Starry. When in the middle of eighties Helicobacters-hunt broke loose, we had been already prepared and ready to join in the very earliest period of the research.

Bioptic business, initially performed by the chief of department only, was after the introduction of National Insurance system in the year 1950 transferred to junior consultants and divided into two rather separated spheres, the establishment biopsies (covering the needs of our teaching hospital), and regional ones (for the remaining hospitals of the East Bohemian region). That was why professor Fingerland was able to bestow all his powers on teaching and research activities.

Introduction of clinical-pathological conferences significantly contributed to the post-graduate education. The similar conferences on Mayo Clinic in Rochester, as known from publishing in New England Journal of Medicine, were always taken by professor Fingerland as an exemplar. These clinical-pathological conferences, the first of which took place in the year 1952, were being arranged each month in the filled lecture halls. Up to now there had been nearly 300 of them. It would be ungrateful not to mention a brilliant contribution of professor of Internal Medicine Jurkovič to their glare.

In the year 1951 the whole Faculty passed under the military control and was converted into the Military Medical Academy. By that time the normal run of our institute was unfavourably influenced by interdiction on professor Fingerland' lectures in the year 1953 as he was refusing by then power assertion of Olga Borisovna Lepešínská's opinion on the cells origin. This prohibition was revoked one year later only after a direct interference of the leader of Chief Political Executive of the Army - general Prchlík.

From middle fifties, from about years 1953 to 1954, there descends our institutional card-index system of necroptic and bioptic findings by the means of modified decimal classification. In spite of the fact that a certain initial role was played by Dr. Vorreith who was by then working in the institute, professor Vortel was the most decisive and for many years the only creator and supplier of these files. The most serious interest in them was always shown especially by cli-

nicians. It would be a great misunderstanding to consider this card-index system to be some superfluous reduplication of the official health paperwork. Its unique features consisted in the fact that it contained not only the nosological units but also some detailed histological findings, especially from the necroptic materials. Professor Vortel personally examined all of them, even those from the most experienced dissection performers.

In the second half of the fifties the spectrum of bioptic investigations expanded. The liver biopsies were introduced. Newly performed suction biopsies of the stomach mucosa required the introduction of enzymatic histochemistry, in which a very important part was played by Dr. František Langr, by that time still a medical student only. However, the volume of routine duties did not allow to go on with these histochemistry tests. From the same reason even the electrone microscope had not been brought into permanent use, though since the year 1952 our department had one of the first electrone microscopes produced by Tesla Brno and experimentally obtained some very successful pictures.

Sometimes even seemingly common requests exceeded the resources of our institute. Following an improvident mention from our part that even cytological investigations of airways secretion are possible within the framework of oncological screening, during 2 weeks all the laboratory tables were covered with hundreds of sputum samples, demanding this oncological investigation. The cytological investigations had to be purposefully totally abandoned so that the routine and indispensable diagnostics of histological samples could ever go on. Neither the next attempt to operate the electron microscope lab when we obtained a new table electron microscope in the year 1965 was lasting for sufficiently long a time, in spite of a promising start when a complicated immunoelectronmicroscopic method was introduced for determining the gastrin levels. The outstanding advancement of an laboratory dates back from as late as early seventies when after personal transfers dictated by communist leader, a well experienced electronmicroscopic worker Dr. Špaček from the Normal Histology Department who was prohibited to teach, found a refuge in our institute. Here he created a remarkably worthwhile and comprehensive work from the sphere of three-dimensional reconstruction of synaptic structures of central nervous system. Also the introduction of immunofluorescent detection of organ autoantibodies by professor Nožička goes back to the late sixties.

The turn of years 1967 and 1968 brought the completion of the vast extension to our institute. At the same time the up to then divided biopsy laboratories were united.

Besides several other arguments also a large incidence of tuberculosis among the institute workers helped in enforcing the extension construction. Especially professor Fingerland and professor Vortel put it through in the offices. The deputy chief doctor Kopečný and the chief technician František Pospíšil became exceptionally involved as organizers during the construction works.

The personal transfers of the post occupational era did not bring to our institute only the personal benefits as in the case of Dr Špaček, but also substantial and irreplaceable losses. As ordered by nomenclature bodies professor Vortel (generally considered to be the future head of our institute) had to leave his position.

Professor Vortel's departure was extra painful not only because he was an extraordinarily talented pathologist but also a considerable organizer of the institute life. The fact that all the preparations, paraffine blocks, slides and even the residues still have their own places and are able to be found out any time should be credited to his person. Professor Fingerland retired after he reached the age of seventy but his designated successor professor Vortel, as explained above, had been eliminated from the faculty. In this situation associate professor Herout who returned from Kuwait was appointed as the chairman of the department of pathology. Activities of professor Herout (together with doctor Kubeš) are connected with an expansion of nephropathology. An increased concern was stimulated by the bloom of kidney transplantation programme and by demands of nephrologists for electronmicroscopic investigations of kidney biopsies, which were pioneered by associate professor Erben from the 1st internal department.

During the whole seventies and eighties there went on the running of an auxiliary bacteriological lab used namely for necropsy diagnostics. The assistance of fully qualified microbiologist doctor Vondráčková was rather appreciated. Nevertheless, the ever lasting lack of interest of medical doctors in our branch of activity represented the permanent source of difficulties.

Quite on the contrary, thanks to the understanding of the new head of institute, professor Fingerland was still able to attend our place. Till his age of ninety he regularly biked in every morning and never missed a single institution seminar.

By the end of seventies there appeared the requirement for arranging some special cytological duties, especially fine needle aspiration cytology from the thyroid gland and pancreas. The care of this cytological service was taken by doctor Kerekes who had already proven his abilities and initiative in the sphere of haematopathology where he had introduced histological investigation of drilling biopsies of bone marrow, using nondecalcinated sections after previous embedding into the hard resin and cutting them by Jung's microtome for hard materials. Without the benefit of consistent training in other departments Doctor Kerekes himself (mainly by comparing the print prepares from materials processed later on histologically) achieved a qualification for this sphere.

After the Summer holidays 1990 professor Herout retired and as a result of the public competition professor Šteiner was appointed to the head of our institute.

Nowadays there are 17 medical doctors working in our institute (3 of them being professors and 1 associate professor). Our department uses the services of qualified specialists in cardiopathology, pneumopathology, ultrastructural pathology of central nervous system, immunopathology, hepatopathology, nephropathology, neonatal pathology and in immunohistological techniques. Our institute is ready to provide all the pathological anatomical services needed by contemporary medical branches.

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