

## David Erlik (1909–1995)

### A Founder of Surgery in Modern Israel

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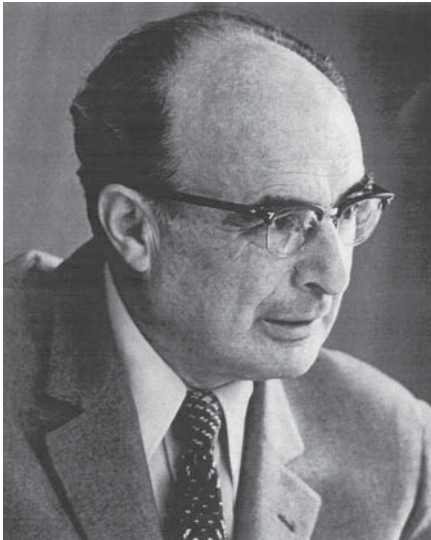
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For many centuries and until less than 100 years ago, the Promised Land was merely a province of the Ottoman Empire. At the turn of the 19th century, the religious interest of European powers in the region initiated the development of Jerusalem. At the same time, scattered Jewish intellectuals in Europe established a movement, called Zionism, aiming to revive the Jewish Nation and rebuild its historical homeland. Jews began to immigrate. The thousands year-old Hebrew language was reintroduced in daily use. In 1918, at the end of World War I, Britain received the mandate over the province, renamed 'Palestine'. This event enhanced the introduction of modern concepts of life and western culture. Schools and hospitals were built. In 1924, the Hebrew Technical Institute (later renamed 'Technion – Israel Institute of Technology') was founded in Haifa, to become the first academic institution in the country. It was shortly followed by the establishment of the Hebrew University in Jerusalem. However, there was no Medical Faculty in either institution. To become a physician, a youngster had to return to Europe. During this period, the medical staff of the small number of hospitals in the country comprised a few specialists, who got their training abroad. Some arrived because of Zionism, others were world famous physicians who managed to escape on time from Nazi Germany. In the newly created Hadassah Hospital in Jerusalem, surgery was undertaken by Dr. E.G. Joseph, a Mayo-trained New Zealander, who immigrated into his historical homeland. In 1937, the young Dr. David Erlik became the first resident of surgery in the country, under the tutorship of Dr. Joseph. At that time, there was no training program

or curriculum, there were no Board Examinations. Yet, from this modest beginning, Dr. Erlik lived to become one of the pillars of surgery in modern Israel.

### The Biography

David Erlik (fig. 1) was born in Pinsk in 1909, at the time a Russian town within the 'Jewish Sector' or 'Pale of Settlement', namely that part of tsarist Russia in which Jews were allowed to live, as ordered by Tsar Alexander III. Due to World War I which was followed by the Bolshevik Revolution, he was merely a 6-year-old child, when he started a long tribulation over Russia to end in 1922 in the newly established Independent Poland. Two years later, stimulated by Zionism, he landed in Palestine. His family established itself in Haifa and, during the coming 4 years, young David succeeded to graduate from the 'Reali' Hebrew High School (one of the two foremost high schools in the country). These were the only years of regular, uninterrupted studies he had. To achieve his childhood dream and become a physician, he had to return to Europe. He chose to study medicine in Montpellier, France, but on his way met friends who convinced him to enroll in Strasbourg's School of Medicine, France, where he studied during 1928–1935. He earned his living by working in a sanatorium for tuberculous patients. It was probably this work that led him to choose his MD thesis, 'Les résultats de l'aurothérapie de la tuberculose pulmonaire, dans le cadre de la cure sanatoriale' [The results of the aurotherapy for pulmonary tuberculosis, in



**Fig. 1.** Professor David Erlik.

the frame of sanatorium treatment]. In 1935, he received his MD diploma from the University of Strasbourg and returned to his homeland, not before he observed on the eastern side of the Rhine River, the gathering storm which was to sweep over and destroy Europe a few years later.

The working opportunities for a freshly graduated physician in the British Mandate of Palestine were scant at the time. There were no residencies in the recently created few existing hospitals. Dr. Erlik was, therefore, fortunate to be appointed as general practitioner in a small newly established agricultural settlement, in the Lower Galilee. He came there in contact with the Jewish pioneers, who worked the land and fought for their survival. For 2 years, he practiced medicine in conditions unimaginable today. Yet, as he mentioned later, these were days in which medicine was far from being scientific but was humane. He was loved and respected by the community he served and was elated to be part of the rebirth of the Jewish settlement in the country. However, his dream to become a surgeon was not abated. In 1936, the Hadassah Hospital in Jerusalem established a few residencies. Residents were called at the time 'house physicians' because they lived in the hospital. Dr. Erlik applied, was accepted out of 40 applicants, and moved to Jerusalem. Until his position was opened, he worked as a volunteer and spent a year in the department of radiotherapy. The treatment of cancer patients in the late 1930s was rather restricted, consisting in many cases of analgesics in addition to 'tender love and care'. Yet, this year crystallized the humane attitude Dr. Erlik gave his patients during his entire career.

In the period 1938–1948, Dr. Erlik acquired his surgical training. In those years, Surgery was 'General' indeed. Orthopedics had begun to branch off, but chest and urological operations were part of the general surgical repertoire. Vascular surgery was undreamed of. Thus, his training was general and he remained an outstanding general surgeon to the end of his career. His teacher was Dr. Edward G. Josef, a surgical trainee of the Mayo Clinic, one of the foremost medical institutions in the world. Despite the precarious facilities in the first years, young Dr. Erlik was exposed to the most advanced techniques of those days. In the mid-1940s, the Jewish-Arab conflict escalated, culminating in the Israeli War of Independence. The Campus of the Hebrew University and the Hadassah Hospital complex on Mount Scopus in Jerusalem were under siege. Dr. Erlik was left as Head of a restricted medical staff. The modern operating rooms of the hospital could not be used, being under fire. It was, therefore, in a small room without windows, next to the kitchen, that the operations of the wounded defendants were performed.

In 1948, Dr. Erlik was appointed as Chief of Surgery in the Rambam Hospital, Haifa, to become the major medical center in northern Israel. He was aged 39 and fulfilled this task for almost 30 years. It is during this period of time that Urology, Cardiothoracic and Vascular Surgery became separate specialties. The hospital expanded its facilities and almost tripled the number of its beds. Finally a Medical School, which became the Faculty of Medicine of the Technion, was established and opened its gates in the autumn of 1969, located in a modest old monastery building next to the Rambam Hospital (fig. 2). Dr. Erlik functioned as its first Dean for 10 years. The Rappaport Family Building for Medical Sciences, in which the Faculty is now located (fig. 3), was built next to the Rambam Hospital Complex. Dr. Erlik was the driving force for all these achievements, not only as instigator, but also as the one who managed to gather the enormous amounts of required donations.

Many objected in the early 1970s to the connection of the new medical school with a technical institution, although the very high academic standard and international reputation of the Technion were indisputable. Indeed all over the world, there were and still are very few such examples of medical faculties in the frame of technical institutions. I clearly remember Dr. Erlik's statement in reply: *In future, medicine will be intimately and inevitably intricately intertwined with advanced technologies.* This was said when the medical application of ultrasonography and computed tomography, flexible endoscopy and endoscopic surgery were undreamed of. Yet, within the next 15 years,



**Fig. 2.** The old monastery building in which the newly created medical school was located in 1969. Haifa, Israel.

the concomitant existence of a large medical clinical teaching center, and a foremost technical academic institution, triggered the establishment of the flourishing biomedical industry in Haifa. Dr. Erlik's vision became reality.

The major achievements of Dr. Erlik were, however, much more important. He established the foremost surgical center in northern Israel. Despite the modest financial means, he maintained the highest and most modern standard of surgery. He used to travel regularly, and met the foremost surgeons of his time: Garlock, Cattell, Swenson, Smithwick, Dragstedt, Wangenstein, Lillehei, Varco, Bailey, Holman, Longmire, Belt, Potts, Hunt, Maingot, Banzet, Nesbit, Gil-Vernet, DeBakey, Cooley and many others. From each trip, he brought back new techniques, which he introduced and applied in the Rambam Medical Center. Thus, he performed the first aortic aneurysmectomy in Israel, using dry-freeze human grafts. In 1966 he carried out the first kidney transplant in Israel and, during his days, Rambam became the leading transplant center in the country. Sub-specialties, like urology, vascular, chest, and cardiac surgery, and intensive care were stimulated by him and strived for. Most important, he created a surgical standard of excellence, which he imbedded in the next two generations of surgeons. The last paper Dr. Erlik ever wrote was a history of the Rambam



**Fig. 3.** The Rappaport Family Building for the Medical Sciences in which is presently located the Faculty of Medicine of the Technion. Haifa, Israel.

Hospital and its contributions to medicine in the northern part of Israel [1].

In 1977, a new Dean replaced Dr. Erlik at the head of the Faculty of Medicine he had created. Two years later, he finally retired from all medical activities in the Rambam Medical Center. However, due to his merits, he was called by the Ministry of Health to supervise surgery in the Poryah Hospital in Tiberias, a task he fulfilled for more than 1 year. When he left in early 1983, he finally parted from all medical activities. In his retirement Dr. Erlik wrote two books. The first, 'Between Me and Medicine – On Dreams and Realty' (1986), was his autobiography. The second, 'Break-Through in Medicine' (1990), dwelt on key events in the history of medicine. Unfortunately, both books were never translated from their original Hebrew, thus being inaccessible to the international readership. The last event in this long, remarkable, and honorable career was his being nominated Laureate of the Prize of Israel for Medicine in 1992, the highest award of the State of Israel.

Toward the end of his life, Dr. Erlik developed an anaplastic change in his long-standing recurrence of thyroid carcinoma, resulting in severe dysphagia. The old surgeon decided against any further surgical intervention or artificial methods of nutrition; he died peacefully on October 28, 1995.

### **The Surgeon**

Dr. Erlik possessed an outstanding surgical technique. He never made brisk, fast movements. Yet, his operations were always very short, because he never made unnecessary movements. When a problem arose during an operation, his decisions were taken immediately and no time was procrastinated on thinking what to do, or how to do it. No need to tell that his decisions, as a rule, turned to be correct.

He would always censure a surgeon for mistakes, but would always do so in the most benevolent and paternal manner. Yet he admitted mistakes. He claimed that there is no surgeon to whom mishaps do not occur, but that a good surgeon knows to deal with them.

His humane bearing was even more evident in his attitude towards the wounded patients. During the wars (Six Days, Yom Kippur), when the Rambam Hospital became the major referral center for the wounded, and in between, he admitted and treated both Israeli soldiers and Arab wounded prisoners of war with the same impartiality. The patient was no more than a wounded hu-

man being and all equally benefited from his excellent abilities.

In the last decade of his life, Dr. Erlik quitted all medical practice, and openly declared so. When laparoscopic surgery was introduced in the early 1990s, he refused even to observe the new operations claiming that he detached himself from medicine. How many surgeons know to put a limit to their practice and admit that their time is passed?

### **Contributions to Surgery**

Dr. Erlik's original contributions to surgery were mainly in the field of portal hypertension. They were due to his ability to find solutions to the most complicated and unexpected problems. Shortly after Blakemore described in the early 1950s techniques for porto-caval shunting, Dr. Erlik introduced the operation in the Rambam Hospital. One of the causes of portal hypertension is the Budd-Chiari syndrome. In this disease, contrary to the case in liver cirrhosis, the rapid progress of portal hypertension does not allow the development of collateral variceal circulation, nor of substantially enlarged vessels in the portal system. Thus, failure to perform a porto-caval shunting was due either to the use of too small vessels or to its being performed at a too advanced stage of the disease. At such advanced stage, the liver is so enlarged and congested, that the cava is compressed, and a porto-caval shunt does not effectively reduce the portal pressure. When a patient presented in the acute phase of Budd-Chiari syndrome, Dr. Erlik successfully performed an immediate side-to-side porto-caval shunt. The patient survived and recovered. The publication of this case [2] was the first description of a successful surgical treatment of the Budd-Chiari syndrome.

In another operation performed for portal hypertension which required a side-to-side shunting, the two veins could not be approximated. Dr. Erlik's solution to the problem was to transect the left renal vein, ligate its distal end, proximal to the confluence of the adrenal and gonadal veins, and anastomose the proximal stump to the portal vein, bridging the caval and portal systems. Thus he conceived the proximal (central) porto-renal shunt [3]. He subsequently examined the left renal function and found it unhampered by the renal vein ligation [4]. Ligation of the left renal vein was subsequently used not only in porto-systemic surgery, but also in surgery for juxtarenal artery aortic aneurysm repairs.

Another example of Dr. Erlik's resourcefulness in solving unexpected problems was the use of a vascularized rectal wall flap for reconstruction of the posterior urethra [5]. The use of vascularized bowel to bridge missing segments of visceral organs later culminated in the ileal pouch used to replace the urinary bladder and the rectum.

### The Future

During Dr. Erlik's long and exceptional career, medicine underwent a dramatic change. At the beginning of his career, medicine was humane though far from being scientific. In the last years of his activity, he often bitterly complained that the patient had become 'a number', that a disease is been treated, not a sick person. In one of

his last publications, Dr. Erlik also mused on the conflict between the scientific truth and the charitable approach to the sick human being [6]. It was his hope that medical schools will find the necessary time in the overloaded curriculum to teach future physicians the required humane approach to patients, and more important, find the teachers capable of imparting such education. He wished that the pendulum of medicine come back to a middle path and returns to be humane and not only scientific.

Dr. Erlik's substantially contributed to the understanding and surgical treatment of portal hypertension. In addition, he was a precursor in the use of bowel segments for the reconstruction of other organs. His place in surgical history is that of an innovator, an outstanding surgeon, and an exceptional personality. His legacy is the example he set to all those that knew him: excellence, humanity and humility.

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### Editorial Comment

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In this issue of the 'historical section' of *Digestive Surgery*, Prof. Moshe Hashmonai of Haifa, Israel, describes the eventful life of one of the founders of modern surgery in what was Palestine and today is Israel.

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In 2000, *Digestive Surgery* launched this historical section with the aim of letting colleagues introduce us to 'modern surgical giants'. In an opening statement [Dig Surg 2000;17(3):315] we wrote:

Defining and selecting a 'surgical giant' defies any scientific criteria and is controversial. The person who for some represents a 'gi-

ant' may signify a 'monster' to others. Should a surgeon's stature be judged based on his remarkable scientific contributions, his legendary operative virtuosity, or the number of times his name appeared on books, covers, chapters, and international meeting programs? Another dilemma we were confronted with is whether to concentrate on the 'professional side' of the 'giant' or - instead - on the human factor which hides within or behind the 'giant'. We decided to combine it all and bring into the fore past colleagues who rose above their peers in reputation, accomplishment, character, and knowledge. Those who served as a role model that others 'look up to'. But mainly those who remain remembered long after leaving this world.

Hitherto, this section dealt with Drs. Sony Du Plessis, Theodore Kocher, Owen Wangensteen, Ivor Lewis, Jan Mikulicz-Radecki, Allan Whipple, Aladár Petz, George L. Jordan and Edward Delos Churchill.

We invite readers to submit their contribution to this section.