POLISH CONTRIBUTIONS TO THE HISTORY OF DIRECT TRACHEO-BRONCHOSCOPY

by

A. LASKIEWICZ

The introduction of low direct tracheo-bronchoscopy is associated with the name of Professor Przemyslaw Pieniazek, founder of the Larynological Clinic in Cracow University, the first ear, nose, and throat clinic in Poland. Born in Warsaw on 20 November 1850, he was a medical student at the Jagellonian University in Cracow, where he graduated in 1874. Then he continued his postgraduate studies at the laryngological department under Professor L. v. Schrötter in Vienna until 1878. Schrötter mentioned in his textbook of laryngology: ‘Pieniazek aus Krakau hat auf meiner Abteilung die endoskopische Untersuchungen der Luft- und Speiseröhre mit Erfolg vorgenommen und öfters geübt’. (‘Pieniazek from Cracow has several times successfully made endoscopic examinations of the trachea and oesophagus’). In 1879 Pieniazek returned to Cracow where he became associate professor of laryngology. His lectures and his work in the outpatients’ department of the surgical clinic (St. Lazarus Hospital) as consulting nose and throat surgeon must be regarded as the foundation of the first outpatients’ laryngological clinic in Poland. Pieniazek’s pertinent accomplishment in observation and examination of various complicated cases involving the upper and lower respiratory organs lead to the application of low direct tracheo-bronchoscopy in 1884. A two-year-old child with a tracheotomy tube, operated on some weeks previously, was referred for treatment of an asphyxial state. When removal of the tube did not improve the respiratory conditions, Pieniazek introduced an aural speculum into the tracheostoma, pushing back the child’s head and slightly rotating it in order to get a suitable position for direct examination of the trachea by using a head mirror and reflected light from the oil lamp. The mass of granulations which appeared in the lumen of this speculum was easily removed with aural forceps. This successful operation restored free respiration to the patient and enabled the examiner to look into the trachea and the bronchial lumina. Encouraged by this first attempt to examine the lower respiratory organs, Pieniazek, with the help of his surgical instruments dealer, designed a set of tracheal tubes for adults and children. Some of them, consisting of two halves with a mandrin, were useful for dilatation of tracheo-bronchial and oesophageal stenoses. The first detailed description of low direct tracheo-bronchoscopy and oesophagscopy was included in his textbook of laryngology as a supplement, published in Cracow in 1887. Then he published accounts of his further experiences in Wiener Medizinische Blätter, Nos. 44, 45, and 46; and in Archiv für Laryngologie und Rhinologie, IV no. 2, V, 1896. His outpatients’ department slowly developed into a clinic with twenty-five beds in a new specially adapted building. His two assistants, A Baurowicz and Fr. Nowotny, started to lecture and to operate upon otological cases. About one hundred cases of scleroma of the upper and lower respiratory organs, many of them treated surgically by tracheo-bronchoscopy were described in Archiv für Laryngologie und
Rhinologie, V and VI. In 1894 Pieniazek presented a paper at the Congress of Physicians and Naturalists in Vienna on his tracheo-bronchoscopical examinations and experiences in surgical treatment of scleroma of the lower respiratory organs. His description of the excision of scleromatous infiltrations using Schröter’s enlarged laryngeal forceps in low direct tracheo-bronchoscopy following dilatation of bronchial lumina with one hard rubber catheter was received with great appreciation by his audience. His demonstration of seven cases of various foreign bodies extracted from the trachea and bronchi in children by the above described method was particularly applauded. Professor Pieniazek’s clinic in Cracow was visited in 1895 and 1896 by many otological surgeons from abroad, among them Professor Thost of Hamburg, and Professor von Eicken of Freiburg-Berlin, who were interested in the new method of examination of the lower respiratory organs and the treatment of scleroma. One of them described his impression during his visit to Cracow to observe the surgical treatment of scleroma in tracheo-bronchoscopy performed by Pieniazek. When, after the skilful excision of scleromatous infiltrations, a hard rubber catheter was introduced into the stenosed right bronchus—considerably improving respiration—the patient kissed the hands of the surgeon before leaving the table.

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