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NOTABLE NOTES

Carlo Forlanini, the Dermatologist Who Invented the Cure for Pulmonary Tuberculosis

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Carlo Forlanini was born in 1847 in Milan, Italy, and was the son of Federico Forlanini, the primary doctor from Milan's Fatebenefratelli Hospital. Carlo was the elder brother of Enrico Forlanini, an inventor and aeronautical pioneer well known for his works on helicopters, aircraft, hydrofoils, and dirigibles. Forlanini joined the faculty of medicine at the University of Pavia. In 1866, he volunteered to serve under Giuseppe Garibaldi, and in 1870 he graduated with a thesis focused on cutaneous inflammation entitled "Contribuzione alla Teoria della Piogenesi."¹ A close friend in his student days was Camillo Golgi, a man who would later achieve eminence as a histologist and receive the Nobel Prize in 1906.²

Milan's main hospital, "Ospedale Maggiore Policlinico" (now "Fondazione Ca' Granda"), attracted Forlanini, and he was accepted in 1871. He spent the next 13 years working in the departments of chronic diseases, eye diseases, and, particularly, skin diseases. In January 1876, he was appointed the head of the skin department, a post he would retain for the next 6 years in order to continue his interest in studying tuberculosis.¹

In the 1882, the same year that Robert Koch discovered the tubercle bacillus, Forlanini introduced a new treatment of pulmonary tuberculosis: the artificial pneumothorax. He based this treatment on the intuition that to heal from lung tuberculosis it was necessary suppress its function, or rather to collapse it to eliminate the respiratory trauma. The method is based on the technique of "collassoterapia," which Forlanini also invented. The technique consists of introducing inert gas into the pleural cavity corresponding to the injured lung so that it is placed in a state of functional rest to facilitate healing.³ For some 40 years before the introduction of antituberculous drugs, artificial pneumothorax offered hope and, in many cases, healing to patients with tuberculosis around the world.

In 1884, he was appointed chair of Clinica Propedeutica at Turin, Italy, and, finally, in 1900 he obtained the chair of clinical medicine at the University of Pavia, an institution that boasted a glorious tradition. This was where Giulio Bizzozzero had made discoveries on the physiologic characteristics of blood, where Paolo Mantegazza had signaled the importance of the glands of internal secretion, and where Edoardo Bassini had developed his method of treating inguinal hernia.² By all accounts, Forlanini was a popular teacher. Among his pupils was Scipione Riva-Rocca, who introduced the first practical sphygmomanometer in 1896.¹

In 1913, Forlanini became a senator of the Italian Republic, and at the time of his death in 1918 he had been proposed for the Nobel Prize in Medicine. After his death, a research fund for the study of tuberculosis was created in his name. In 1934, the "Carlo Forlanini Institute" was founded in Rome, comprising a complex of sanatorium, university clinic, laboratories museum, and research center.¹

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