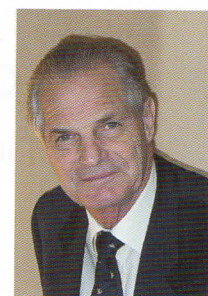


PIERRE FRANCO (1504-1580): A FORGOTTEN PIONEER

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Among surgeons of the Renaissance, Pierre Franco is often considered by medical historians as a secondary figure, as compared to Ambroise Paré, whose life has been recently very well summarized by Riccardo Mazzola.¹ This is due to the fact that we know very little of Franco's life. In the two books he published, he tells next to nothing about himself, whereas Paré excelled in describing his achievements. Moreover, since the 17th century, many books and articles describing the adventurous life and the innovations of Paré have been written, leading sometimes to a true hagiography, whereas Franco is rarely quoted.

Fortunately, a few historians and doctors have read Franco's books and acknowledged his important contributions in the field of surgery. Edouard Nicaise, who published in 1895 a new edition of Franco's work,² states in his introduction: "From a practical point of view, Franco should be considered as the first surgeon of the sixteenth century. Paré was an active man, observant, a man of genius, but he left aside what made the success of Franco, that is the operations of hernia, bladder stones, and cataracts. Franco spent his life in a completely different and modest setting compared to Paré, but he invents operations that should remain in the practice of surgery; there is no surgeon who has given more discoveries to surgery."

Frank McDowell, the eminent plastic surgeon and medical historian, has also compared Franco to Paré favorably:

As the light of the Renaissance melted the darkness of a thousand years, the figures of two great French surgeons emerged – Pierre Franco and Ambroise Paré. They were colleagues and rivals according to the preponderance of evidence, not student and teacher as some have suggested. In 1561, Franco published his *Grand Traité*, a book of about 560 pages. This book was to be a standard reference work for the next 200 years; it went through five editions. (The first book published by Paré was his *Dix livres de chirurgie* – a small book of ten chapters – in 1564. In it he more or less copied, without credit, the sections of Franco's book on lithotomy and cystostomy. However, Paré acknowledged this later in his 1575 *Œuvres de Chirurgie*) wherein he also acknowledged that he learned the operation of debridement from Franco.³

To write a biography of Pierre Franco, as I have attempted to do,⁴ one should therefore not only read and interpret his texts correctly, but also should try to collect information that is scat-

tered in different archives of cities where he spent most of his life, that is mainly Lausanne and Geneva. The next step is to inscribe his life and writings in the political, religious, medical and sociological setup of his time.

Pierre Franco was born between 1500 and 1505 in Turriers, a small town in the lower Alps of Provence. Turriers still exists and the visitor will find a plate in honor of the great surgeon in front of the town hall (Fig.1). The family of Franco was probably aware of the movement named by the church inquisitors *Les Vaudois de Provence*, in reference to its founding father "Valdes"

Pierre FRANCO (circ.1505 - 1578) Surgeon

Pierre Franco was born in the hamlet of Giere in the Commune of Turriers.

Qualified as «tailor of bladders, hernias and cataracts», he created, with outstanding genius, the «hypogastric size» and the process of curing abdominal hernias without removing genitals : a major progress, which put an end to castration. Great urologist before the term existed, he is considered as one of the most outstanding Renaissance surgeons, and in some respects, at least an equal to Ambroise Paré.

A number of surgical techniques, created by this great medical precursor, are still practiced in our XXIst century.

Fig. 1—Plate in the town of Turriers

from Lyon, precursor of the protestant reformers two centuries before the Lutheran and Calvinist Reformation. Also called *Les pauvres de Lyon* (the Poor of Lyon), they were severely condemned by the Catholic Church as they criticized the belief in the Pope's supremacy and in the saints, as well as the wealth of the bishops. Their predicants, named the *barbes*, were going from village to village, practicing small trades, often leading a life as barber-surgeons to attend the poor people. At the time of the Calvinist Reformation, most of them became Protestants and several migrated to the French area of Switzerland to avoid persecution.

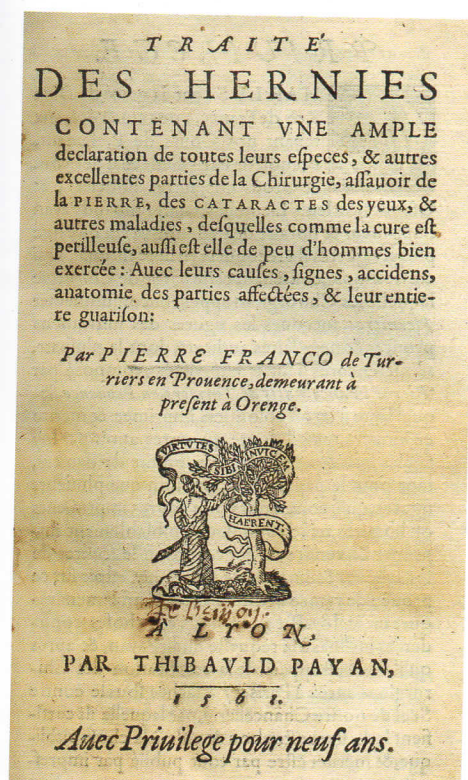


Fig. 2—First edition of Franco's book in 1561

Although we have no document concerning Franco's education, we know that he did not attend university. However, reading his writings where he quotes more than fifty ancient authors, sometimes in Latin and even in Greek, one can figure out that, before becoming a surgeon, he received a proper education.

He is supposed to have learned his profession by visiting the Masters in Surgery in the South of France. In 1545, we find him in the French part of Switzerland, mainly in Lausanne, a city which had adopted the Calvinist Reformation. His first book (*Petit Traité des Hernies*) was published in 1555 in Lyon and was signed "Pierre Franco, surgeon of Lausanne."⁵ His master book (Fig. 2) published in 1561 states that he was then in Orange, a small county located in Provence, but we know that soon after, he returned to Geneva and Lausanne, probably to avoid religious prosecution.

In those times, life for surgeons, barbers or "incisors" was not easy because of the difficulty of their new art, and the

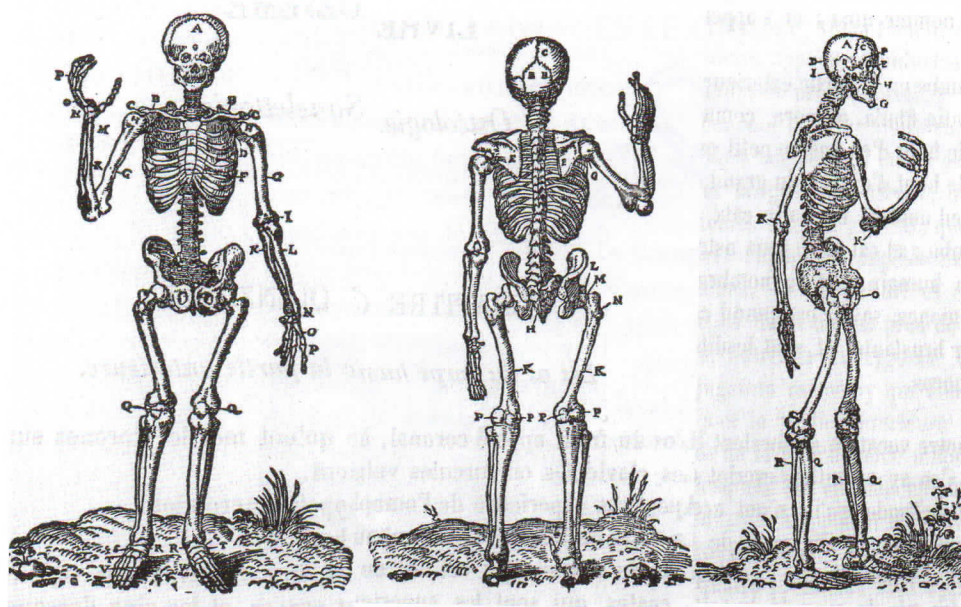


Fig. 3—"Skeletopy": Articulated skeletons invented by Franco

hatred and mistrust of physicians. There were occasions where surgeons actually had to escape in order to save their own lives. Although Franco belongs to the group of itinerant "incisors" for stones, hernias, couchers of cataracts and bone-setters, he indignantly set himself up against the charlatans who pretended to operate without experience:

Who are responsible for this part of surgery being so despised, who being ignorant and knowing it, nevertheless without any fear to treat all sorts of curable and incurable ailments, as long as they can attract the money of poor simple people; who seduce and enchant by their lies and good words, to the great harm of poor patients who often are brought to death by such swindlers.

What could be more outrageous for the Creator, than putting a hand on his most excellent creature with carelessness, without previous practice or having followed an expert Master, and for a long time? If it is necessary to employ a long time to learn carpentry, which is work on wood and dead things, how could we put our hands on a human without being instructed in our art?

According to a few official notices or quotations of people who have known him, he was a man of great talent, gentleness and humility. His character can also

be felt in his writings where, on the one hand, he shows a great modesty, but on the other he is very proud of his profession and his inventions. He only writes about operations that he knows well and with which he has had a great deal of experience. "Neither books nor men taught me this method . . . but experience, master of all things, showed it to me."

In each field, he starts by giving a thorough description of the anatomy. "Before all things, I propose the description and the anatomy of the parts on which one must operate, to give a clear knowledge of things to the surgeon."

He performed several cadaver dissections and prepared whole body skeletons for teaching purposes. Some of these skeletons with recreated articulations had been exposed to the public to show the movements of the various bones (Fig. 3). For these, he was rewarded a price by the Swiss authorities. The writings of Franco are particularly innovative in five fields: hernias, bladder stones, cataracts, obstetrics and clefts.

Hernias — Franco presents several methods of operations and invents a way to preserve the testicle. The suture of the orifice is best achieved with a golden

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Franco, continued from page 27

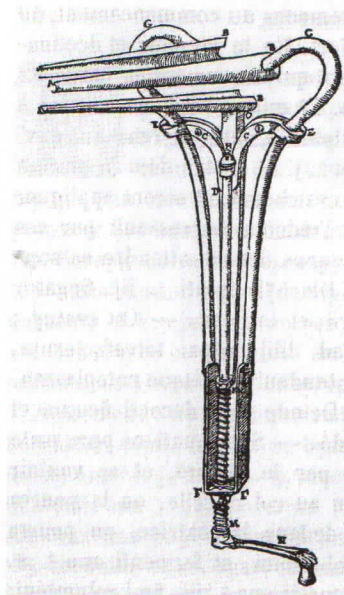


Fig. 4—Speculum matrixis

thread. Franco is the first to operate on incarcerated hernias with success, and to describe intra-abdominal adhesions. He advises to resect and ligature the vessels of the omentum whenever it is included within the hernia content. In one case he was able to resect up to one pound of omentum.

Bladder stones – Probably because of poor protein diet, men and even children were often suffering from bladder stones. When a stone started to obstruct the urethra, it would cause immense suffering, which could lead to death. Bladder stone removal had

always been performed through a perineal incision. Franco was in favor of a two-step operation, which could be better tolerated by the patient. In a child, where he could not access the bladder by this approach, Franco realized the first supra-pubic incision to remove a large stone and save the child's life.

Obstetrics – When the fetus does not present itself in the proper position, Franco described the method of rotating it manually: the podalic version. He also invented a special speculum to access the uterus, considered a precursor of the modern forceps (Fig.4). A cesarean section is performed only to save the child when the mother is dying.

Cataract – The couching of cataract is the preferred operation of Franco. He describes the symptoms of the disease and exposes the differential diagnosis. He emphasizes the skill and

precision necessary for this delicate procedure. Incidentally, Franco gives us the first medical statistic, stating that eight over ten patients have been cured by his operation.

Clefts – Franco's discoveries and innovations in cleft surgery are overwhelming. He was the first to describe the congenital origin of cleft palate and gave very detailed descriptions for the cure of single and double clefts, emphasizing the need of mucosal flaps to recreate the inner lining and temporary splints to release the tension on the suture line. The most fascinating case report concerns a full thickness cheek defect of an egg size, probably following noma infection. The preoperative condition, the surgical method, the postoperative care and the follow up are given in detail and constitute a model of surgical report.⁶

Without any doubt, thanks to his operative innovations and inventions of new instruments, Pierre Franco should be considered as a major contributor and even the father of modern interventional surgery. ISAPS

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