

Don Antonio Corbella y Fondabila's Treatise on Chest Diseases

J. Sauret Valet

Departamento de Neumología. Hospital de la Santa Cruz y San Pablo. Barcelona. Spain.

The need to publish monographs on diseases affecting the diverse systems of the human body clearly dates from the second half of the 19th century, when medical and surgical specialties were beginning to develop.

In pneumology, the 17th and 18th century literature was dominated by phthisiological treatises because of the high mortality due to the terrible spread of tuberculosis, which upstaged all other diseases of the era. Such treatises therefore did not cover the full scope of respiratory disease. An exception was R.T.H. Laennec's first 1819 edition of *Traité de l'auscultation médiate et des maladies des poulmons et de cœur (Treatise on mediate auscultation and diseases of the lungs and heart)*, considered the first serious attempt to deal with the subspecialty of cardiopulmonology as a whole.

Few, however, are familiar with the 1795 Madrid publication of what was probably the first Spanish monograph on specifically thoracic diseases and one of the first in world medical literature. I refer to the *Treatise on Common Chest Diseases, Acute and Chronic* by Don Antonio Corbella y Fondabila¹ (Figure 1). Accordingly, the purpose of the present paper is to bring to light the most important aspects of this treatise.

Little has been published about Corbella y Fondabila. Seemingly he came from Barcelona and was a student at the Royal College of Naval Surgeons in Cádiz, entering in 1767. He was posted to America as a lieutenant *protomédico* — a title referring to his appointment to the King's own staff of physicians — in the provinces of the Rio de la Plata, Paraguay, and Tucuman. In 1794 he published *Disertación médico quirúrgica (Dissertation on Medicine and Surgery)*.² His 1795 *Treatise on Chest Diseases*, the subject of this paper, was dedicated to Francisco Martínez Sobral, chief physician to the King of Spain. In the introduction to this work, Corbella y Fondabila addresses the public to explain what motivated him to write the book:

"...To dispel the ignorance of those who, lacking learning and the requisite application of true Professors, have no instruction or true knowledge of the causes which lead to and produce maladies. This, I am persuaded, is

surely one of the reasons why you, your honors, are led to opine on the merits of different texts, and to read and defend the Spanish ones which, filled with zeal for promoting good health, never cease to pronounce rules to guide those who, destitute of what they need for banishing their own infirmities, proceed fearlessly to treat themselves: Thus, and clearly seeing that diseases of the Chest are quite common, I have written this Treatise of the principle Diseases, Acute and Chronic, which usually affect this cavity and although infinite Authors have spoken about them, perhaps this Treatise with its various merits which those lack will serve better to enlighten and not become confused with others that do so prejudice your honors' health."

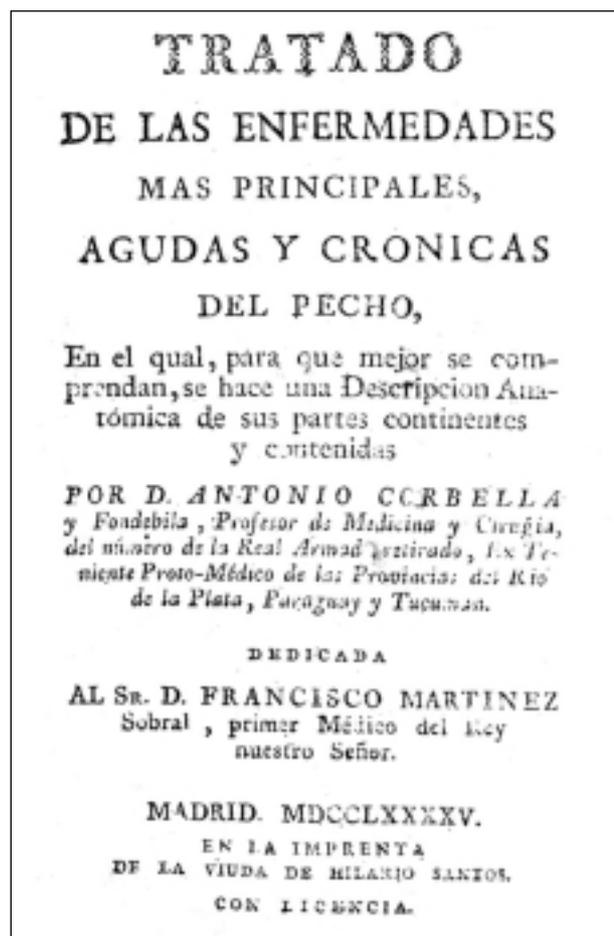


Figure 1.

Correspondence: Dr. J. Sauret Valet.
Departamento de Neumología. Hospital de la Santa Cruz y San Pablo.
Sant Antoni M.^a Claret, 167. 08025 Barcelona. Spain.
E-mail: jsauret@hsp.santpau.es

Manuscript received February 10, 2003.
Accepted for publication February 27, 2003.

Corbella y Fondebila's *Treatise* is divided into chapters on hoarseness, cough, suffocative catarrh, an anatomical description of the chest and the parts which it contains, on inflammation, peripneumonia, asthma, hemoptysis, phthisis, expectoration, empyema, hydroposia of the chest, heart palpitation, and fainting. I will summarize the parts that, in my opinion, are some of the most interesting in the treatise.

Cough is dealt with at some length, in 32 pages. The most frequent causes of a persistent cough are recognized as being "any of the infinite diseases of the vital cavity," such as peripneumonia, hydroposia, and phthisis, and also the presence of foreign bodies in the larynx. His remark about scarlet fever is curious: "In the year 81 in the Kingdom of Peru, there was a great epidemic of Scarlatina, to which the natives gave the name of Pantomime." Surely this was the persistent cough associated with the tracheal and pharyngeal infection of scarlatina. There are constant references in almost every chapter to a book on medical practice (*De praxi medica*) by Baglivi (1668-1707), which must have been the *Harrison's Principles of Internal Medicine* of those years. To Baglivi, *maestro* of the Italian clinics, he attributes the aphorism, "There is no better book than the patient himself," which is quite suggestive of Corbella y Fondebila's own sources of knowledge.

For example, in warning of the nasty consequences of the spasmodic cough, he reproduces the following comment: *Tusis violenta producere solet in pueris herniam, in feminis abortum, in viris phthisim, et ideo numquam spernendam*.^{*} Regarding treatment, the most important factor was to identify the cause, especially when the cough was caused "by a substance adhering to the bronchi and the internal part of the Lung, which impedes the admirable effects of the entrance of air inwards of that space." As useful medicines he recommends cough syrups or expectorants, vulneraries, balms (syrups of hedge mustard, lobelia, and benzoin flowers; balsam of sulphur vivum and Lucatellus's balsam), but if the cause was "some rheumatic substance," specifics to induce sweating were to be used (Chinese root, guaiac, sarsaparilla, diaphoretic antimony).

The suffocative catarrh, normally an advanced stage of chronic phlegmatic catarrh, presented a very critical clinical picture. In present-day terms it would be akin to the exacerbation of chronic obstructive pulmonary disease with severe respiratory insufficiency, although it also resembles acute pulmonary edema. From the following comment Corbella y Fondebila seems to lean more toward the first hypothesis:

"What was observed during the anatomical dissections of the Cadavers of those who had the disease and died during an insult was that their bronchial and tracheal arteries were caked with a considerable amount of sticky

substance which obstructed and filled most of the Lung passages, neither letting the air occupy those spaces nor pass inwards of the space, and not being able to take in breath, they had no alternative but to die in the last stage of the suffocative catarrh, which concludes these commentaries on Diseases of the Chest."

Yet, the treatments he proposes seem more appropriate for acute pulmonary edema: bloodletting "...to regulate, the ventilation of the Veins, but not in excess"; enemas of malva water and oil "...to relieve the bowels of fecal matter which, detained in the lower intestine, slows the circulation of the blood in the Entrails of the lower abdomen, which promotes or impedes the relief of superior parts"; foot baths "...to attract and call the blood toward the inferior parts"; emetics and ligatures "...because the latter are very good at stimulating solids and the former at moving them downward and outward, an improvement in the Patient is usually achieved."

The chapter on asthma begins with a definition: "Asthma is an habitual difficulty in breathing, which can be more or less severe, continuous or periodic, without fever, and independent of any Disease, it is not so common as many would have it be." Corbella y Fondebila goes on to discuss the differential diagnosis of the various causes of "offended respiration," for instance apnea, dyspnea, asthma, and orthopnea. He continues with the signs and symptoms that most characterize asthma: difficult breathing, coughing, wheezing, and chest pain. Among the possible causes he correctly intuitively identifies are occupational exposure to allergens and strenuous physical exercise:

"People at risk of asthma are those who ordinarily breathe an air charged with dust, or vapors from mines, which take away one's breath and which the Indians call *apunarse* (mountain sickness); those who breathe carbon smoke, be it from wood or coal &c. Those who excessively exert themselves physically, those who are immoderate with food and drink, those who lend themselves to violent passions of the spirit and, finally, those who because of temperament or whatever cause in particular are apt to agitate their blood."

Although all these judgments may seem accurate, the truth is that in those times the word asthma encompassed a variety of clinical pictures (especially heart failure) which had no connection with bronchial asthma. In order to appreciate the difficulties, here is a description of one of the many sick people treated by Corbella y Fondebila:

"I was physician to a Lady whom I saved from death more than a hundred and forty times and who, after one insult, would have another eight days later, sometimes twenty days passed without an insult, sometimes a month and a half or two months, other times she would suffer two or three insults on the same day, in such a manner that the first was mild, the second terrible, as was the third if and when it came, and at the termination came a flow of urine

^{*}Violent coughing tends to cause hernia in children, miscarriage in women, and consumption in men — and it never fails to march onward.

so abundant and as she had no strength to rise from her bed (as much from age as from destruction) her daughter, who was caring for her, had to change the sheets, with many folds, mattresses, palliasses, and other bedclothes which they put underneath, as the urine passed through everything incredibly. In the act of the accident, which was all convulsive, to see the face of that lady caused great horror because it became almost black, her carotids tensed becoming hard as sticks, and in like manner her subclavian arteries, which seemed to be larger than her collarbones, could be touched and clearly seen. Her face and lip muscles jerked and writhed ceaselessly as did all the extremities and parts of her body, which worked themselves into a fearsome state. And I can easily say that many, seeing the magnitude and the turgidity of her Veins, would have instantly bled her without reflecting upon the state of her solids, thus provoking a general hydropexia. Her state provoked a flow of blood which issued from her nostrils following a great facial collapse. But then the flow of blood ceased and her condition stabilized, though she was left very weak. Nevertheless, cured of the hydropexia which the loss of blood had caused, she died later on in another of her habitual paroxysms."

The chapter on phthisis also contains some interesting observations. For Corbella y Fondebila, as for Baglivi, the sickness is *Corruptis Ulcerosa pulmonum cum febre; et corporis extenuatione conjuncta*.**

Much has been written about the acute popular intuition accounting for the 18th century notion in Spain and Italy that tuberculosis was a contagious disease spread by noxious miasmas left by the sick on utensils, clothes, and furniture. This viewpoint — which was not subscribed to in the rest of Europe — prompted some cities to dictate regulations that were very advanced for that time. We realize just how deeply rooted these ideas were, as we read Corbella y Fondebila:

"The Symptoms are so patent that the characteristics of the disease hardly need mention or explanation as it is so notorious among people that they flee from the houses and places where phthisics have lived and do not want to use the clothes or jewelry worn by the sick but throw them out and burn them, not only of their own volition but by order of the Magistrates, so as to preserve themselves from the likes of that Disease, not only for the good of the individual but for that of the community as well."

Corbella y Fondebila's concept of phthisis actually included all chronic respiratory suppurations. This is evident when he says that some sick people's lungs and chests are filled with pus, that their purulent sputum gives off a terrible stench (abscess due to anaerobic bacteria), or when he comments on the "anatomical inspections" performed. But it is only fair to recognize that this

misconception was generalized at that time. It is also apparent when he enumerates the causes of the disease, basing his statements for the most part on classical Greco-Roman ideas:

"The various causes of phthisis are, firstly, immoderate use of Venus, wine and spirited liqueurs, the suppression of regular fluxes, the absorption of the substance which ulcers relinquish, or better said, delitescence. The reabsorption of the humors which appear on the surface of the body, complications of certain Diseases such as Asthma, Scarlatina, Smallpox, Peripneumonia, Wounds and continuous Cough, Catarrh, &c. Thus all those who suffer these Diseases are more likely than others to contract phthisis, as are those who are doted with bad Chest conformation or who have a bad constitution in general, which is usually hereditary. This Disease is usually preceded by venereal lues, Scorbutus, Scrofula or swollen glands, Gout, and by other ills which are frequently not manifested, so as to be symptomatic, but still, as with confirmed phthisis, rarely does the Patient recover."

Regarding the treatment of phthisis, Corbella y Fondebila sharply criticizes bloodletting as useless (as he also does in the case of asthma) and declares himself firmly in favor of administering milk drunk directly from the breast — something he doubtless learned from Hippocrates and Galen: "If it were possible that all phthisics could regularly nurse from the Breasts of any healthy woman, perhaps it would be the only remedy which might cure them." After making a rather pessimistic judgment of the long list of the medicines used, he concludes the chapter with a revealing comment worthy of a great clinician about the importance of correct diagnosis. This passage also conveys the social repercussions of the disease:

"I could refer to a case that happened when I took charge of a Patient from a certain Hospital who as he was hospitalized with phthisis, I had him go to the countryside, and six months later on coming back, cured, the same ones who had unjustly reported him to the General as being a true Phthisic hardly recognized him."

The remaining chapters also contain descriptions and comments as unusual and interesting as these but, as I stated at the outset, it is not my objective to describe the book in detail but rather rescue it from oblivion. If now the name of Antonio Corbella y Fondebila is known to pneumologists as that of an intelligent precursor who was ahead of his times, I will be satisfied.

REFERENCES

1. Corbella y Fondebila A. Tratado de las enfermedades más principales agudas y crónicas del pecho. Madrid: Imprenta de la Vda. De Hilario Santos, 1795.
2. Calbet Camarasa JM, Corbella Corbella J. Diccionari biogràfic de metges catalans. Barcelona: Fundació Vives Casajuana, 1983;3: 236.

**Ulcerated, corrupted lungs, with fever, associated with wasting of the flesh.