

R T H Laënnec 1781–1826

His life and work: a bicentenary appreciation

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ABSTRACT René Théophile Hyacinthe Laënnec was born on 17 February 1781 in Quimper and spent much of his youth in Nantes, where his uncle Guillaume was Dean of the Faculty of Medicine. He was considerably influenced by his uncle and went to study medicine in Paris where he qualified in 1804. Among his teachers were Corvisart and Bayle who stimulated his interest in the clinical diagnosis of diseases of the chest and especially tuberculosis, from which Laënnec himself suffered. His clinical experience and morbid anatomical dissections at the Necker Hospital culminated in his invention of the stethoscope (1816) and the writing of his masterpiece *De l'Auscultation Médiante* (1819) which may be regarded as the pioneer treatise from which modern chest medicine has evolved. Despite his great success in Paris, Laënnec always retained a great love for his native Brittany. When his health finally broke down, he returned to his home Kerlouarnec, near Quimper, and died there on 13 August 1826, aged 45 years. On the occasion of the bicentenary of his birth we pay homage to the memory of this great French physician.

“People will not look forward to posterity who never look backward to their ancestors.”

Edmund Burke: Reflections on the Revolution in France

Two hundred years have elapsed since the birth of the great French physician, René Théophile Hyacinthe Laënnec, who, by his invention of the stethoscope, bequeathed to us the first tool to aid clinical diagnosis, as well as providing the symbol by which, more than any other, the physician is at present recognised. Moreover, in his great treatise, *De l'Auscultation Médiante*, Laënnec's rational clinico-pathological approach may be said to have laid the foundations of modern clinical medicine and especially our understanding of cardiorespiratory disease.

Birth and early years in Quimper

Laënnec (fig 1) was born on 17 February 1781 at 2 rue du Quai, Quimper, in Southern Brittany, France. Quimper, at the junction of the rivers Odet and Steir, is the capital of the county of Cornouaille, in the *département* of Finistère. It was, and is, a charming old walled city, with its



Fig 1 RTH Laënnec. From coloured engraving, reproduced by courtesy of the Wellcome Trustees.

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narrow streets and twin-spired cathedral of St Corentin. Laënnec came of good Breton stock—his father, Théophile Marie Laënnec, became an Admiralty judge at Quimperle, and his mother Michelle (née Guesdon) came from a well-connected Quimper family. The name Laënnec most probably derived from the Breton “Lennek”, meaning reader or scholar. Laënnec was baptised René after his godfather (his grandfather), Hyacinthe after his godmother (sister of his godfather), and Théophile (after his father). He was the eldest of three children. A younger brother Michaud was born in 1782 and a sister Marie-Anne in 1785. In 1785, Laënnec’s mother died at the confinement of her fourth child, who died shortly after birth. His father, a gay but somewhat feckless character, was left a widower with the three young children—Laënnec then aged 5 years—with whom he could not cope. The children stayed at first with an uncle Michel Jean Laënnec, a nearby rector, for one year, but it was then arranged for the two boys to be sent to Nantes to be cared for by another uncle, Guillaume François Laënnec (1748–1822), who was the Dean of the Medical Faculty in the University of Nantes.

Nantes and Uncle Guillaume

Laënnec was aged 7 years when he and his brother Michaud sailed to Nantes in 1788. They stayed with their uncle Guillaume in his apartment in Place de Bouffai. France was then in the throes of the Revolution, and 1793 saw the Terror in Nantes. The red-painted guillotine stood in the Place de Bouffai, and the young Laënnec must have witnessed from his window the gruesome execution scenes. Laënnec was a lively ginger-haired lad, proficient at his studies, learning Latin, Greek, and English, and showing a talent for writing poetry. He was fond of playing the flute, was keen on dancing, and as a hobby developed a skill in whittling.

He admired his uncle Guillaume, whose example influenced Laënnec’s choice of medicine as a career. In 1795, aged 14, Laënnec was already helping in the care of the sick and wounded in the Hôtel Dieu in Nantes, and by 1799 he was serving in the Military Hospital in Nantes, with the rank of third class surgeon. The worst excesses of the Revolution were now subsiding, and Laënnec was keen to proceed to Paris to continue his medical studies. Unfortunately, he received little support from his father, who had remarried in 1795, but with uncle Guillaume’s encouragement he at last obtained a small stipend from his

father, and in 1801 he set out for Paris by carriage, although he walked the last 200 miles to the capital!

Paris School of Medicine

On arrival in Paris, Laënnec lived in the Latin Quarter with his brother Michaud (who was reading Law), and began his medical studies at the École de Médecine. The Paris school of medicine, no doubt stimulated by the revolutionary spirit of the times, had become the chief centre of clinical research in France, and probably in Europe, and Laënnec came under the influence of great teachers. He was a pupil of Guillaume Dupuytren (1777–1835) at the École Pratique, dissected under Xavier Bichat (1771–1802), and at the Salpêtrière and Charité hospitals he was taught by the great Jean Nicolas Corvisart (1755–1821) and Gaspard Laurent Bayle (1774–1816). Bayle was at that time seven years older than Laënnec, but the two men soon became great friends.

Laënnec was now the typical impecunious medical student, very industrious, with the ambition to qualify and return to country practice in Brittany. As a student, he was already publishing papers on peritonitis, the liver capsule, amenorrhoea, and so on. He obtained the first prize in medicine in 1803, and in 1804, aged 23, he qualified MD with a thesis entitled *Propositions sur la doctrine d’Hippocrate relativement à la médecine pratique*, based on a study of the master’s writings in the original Greek.

After qualification, Laënnec was engaged in hospital practice in Paris, but also spent a considerable time lecturing, which he did in Latin, and writing many papers, for example, on angina. He worked on a book on pathological anatomy which was never published, coedited the *Journal de Médecine*, and contributed to the *Dictionnaire des Sciences Médicales*. His reputation as a sound physician soon spread, and among his patients (many of whom were Bretons living in Paris) there numbered famous contemporary figures, such as Madame Chateaubriand, Madame de Staël, and Cardinal Flesch (uncle of Napoleon Bonaparte).

Laënnec’s health

In late eighteenth and early nineteenth century Europe, tuberculosis was rife, accounting for one in four deaths (“Captain of the men of death”) and its infectious nature was not appreciated. Laënnec’s mother was already consump-

tive when she married, and her death at the age of 32 was no doubt contributed to by tuberculosis. His uncle Michel Jean with whom he lived for one year before going to Nantes died from the disease. His younger brother Michaud, who was very close to him in his youth and also lived with him as a student in Paris, suffered from tuberculosis and died in 1810, aged 28.

Laënnec himself developed respiratory symptoms (“asthma”) around 1796, aged 15. By the time he qualified in 1803 he was very ill with phthisis. His long hours of medical work, coupled with further exposure to large numbers of tuberculous patients as well as necropsies on those dying of the disease, led to further deterioration of his health.

Laënnec was small, only 5' 3" in height, and he became thinner and wizened in appearance as his tuberculosis became more established. In 1814 after a spell of intense work at the Salpêtrière and the Hôtel Dieu, which was full of sick and wounded soldiers from the Napoleonic campaigns, Laënnec's health broke down and he was forced to take a prolonged rest in Brittany.

Laënnec's teacher Bichat died of tuberculosis in 1802, aged 31, and his great friend Bayle died of the disease in 1816, aged 42.

Laënnec's love of Brittany

As a lad, Laënnec came to love his native Brittany countryside and coast. There was, at that time, a resurgence of interest in the Breton heritage and culture (“Celtomania”) and Laënnec was an enthusiastic follower of this movement. He mastered the Breton tongue and in 1799, aged 18, he amused himself by writing a poem, ostensibly a translation from the Celtic *La Guerre des Venètes* in which the author's name was disguised in reverse form, as “Docteur Cen Neal, Professeur de langues primitives.”

Laënnec's father had inherited a large country house and estate, the manor of Kerlouarnec, at Ploaré, near Douarnenez, 20 kilometres west of Quimper, but he was always short of money and could not maintain it. The property was ceded to Laënnec in 1804, although it was not until 1810, after some unseemly litigation between father and son, that Laënnec at last acquired Kerlouarnec (fig 2). The house and estate were in a deplorable condition, and all his resources were needed to restore them.

In a letter written from Paris to a friend in 1812, Laënnec wrote:

“At present, I am cluttered, that is, buried under the ruins of the multitude of sick, I live

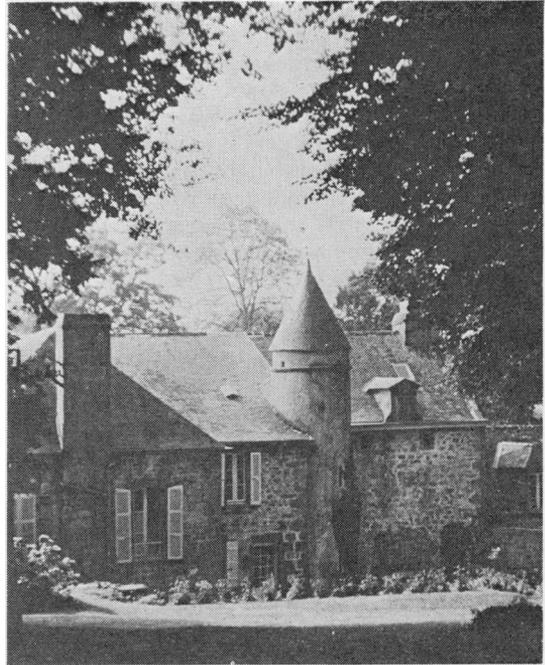


Fig 2 Kerlouarnec. View of rear of house.

in the midst of the dead and the dying. This is the best thing in the world for a doctor, but when it lasts too long it becomes a bore.”

Another letter written from Paris to a friend in country practice in 1817 contained the following:

“I rise at half past seven or even eight o'clock as I need much sleep. Generally I dress while giving consultations. Then I make my visit to the hospital and there give some lectures to my pupils. This takes me to half past ten and already time is so short that often I cannot return home for lunch. Then I begin my rounds which I do not finish before half past five. After dinner, which means about half past six, I start on another round which lasts until eleven o'clock when I go to bed; in addition I have a few minutes from time to time before lunch and dinner to keep my varied correspondence up to date, correct and put in order the observations collected by my pupils in my hospital and to settle small matters.

This picture can only give you a faint idea of what this social whirlwind in Paris can cause in the way of complications to a busy man no matter how carefully one tries to simplify them. I have often wondered why you and some of your colleagues have established yourselves in

small towns. To-day I understand and approve heartily and between ourselves, I am thinking very seriously of arranging my affairs so as to be able to retire to lower Brittany within a very few years. If I had what is owing to me now, I would probably do it to-day . . .”

It was at such times that Laënnec yearned for the peace of his Brittany estate, where he enjoyed playing the country squire, engaging in horse riding and shooting with his dogs.

Invention of the stethoscope

Laënnec's great teacher and friend Bayle died in 1816. Bayle had been *chef de service* at the Hôpital Necker, in the rue de Sèvres, a little distance from the university quarter. Laënnec was attracted to the Necker because of its situation and gardens, and in 1816 he succeeded Bayle. He was now in charge of 100 beds, nursed by Sisters of Mercy, and his patients provided him with the clinical material that he required for his researches into chest disease, correlating physical signs with the morbid anatomical findings at the necropsies which he himself performed on all patients dying at the Necker.

In 1761, Leopold Auenbrugger (1722–1809) had published in Vienna his small volume *Inventum Novum* in which he introduced percussion as a new method of clinical examination for detection of lung consolidation, pleural effusion, and so on. Significantly, in that same year, Giovanni Battista Morgagni (1682–1771) published his great work *De Sedibus et Causis Morborum* (1761) which proved to be the foundation of the modern study of morbid anatomy. Auenbrugger's work passed relatively unnoticed until Jean Nicolas Corvisart in 1808 translated *Inventum Novum* from the original Latin into French. This work proved to be an important influence on contemporary French physicians, including Laënnec, who was stimulated to improve clinical diagnostic techniques even further.

Direct auscultation (by an ear on the chest wall) had been known, but little practised, from ancient times. Laënnec later wrote:

“Direct auscultation was as uncomfortable for the doctor as it was for the patient, disgust in itself making it impracticable in hospitals. It was hardly suitable where most women were concerned and, with some, the very size of their breasts was a physical obstacle to the employment of this method . . .”

The story of how Laënnec wandered through the Tuilleries and observed two lads at play, one scratching with a pin the end of a beam of wood

while the other listened at the opposite end, may be apocryphal. However, there can be no better description of the discovery of *médiate auscultation* than that in Laënnec's own words:

“In 1816, I was consulted by a young woman labouring under general symptoms of diseased heart and in whose case percussion and the application of the hand were of little avail on account of the great degree of fatness. The other method just mentioned being rendered inadmissible by the age and sex of the patient, I happened to recollect a simple and well-known fact in acoustics, and fancied, at the same time, that it might be turned to some use on the present occasion. The fact I allude to is the augmented impression of sound when conveyed through certain solid bodies—as when we hear the scratch of a pin at one end of a piece of wood, on applying our ear to the other. Immediately, on this suggestion, I rolled a quire of paper into a sort of cylinder and applied one end of it to the region of the heart and the other to my ear, and was not a little surprised and pleased, to find that I could thereby perceive the action of the heart in a manner much more clear and distinct than I had ever been able to do by the immediate application of the ear. From this moment I imagined that the circumstances might furnish means for enabling us to ascertain the character, not only of the action of the heart, but of every species of sound produced by the motion of all the thoracic viscera. With this conviction, I forthwith commenced at the Hospital Necker a series of observations, which has been continued to the present time. The result has been, that I have been enabled to discover a set of new signs of diseases of the chest, for the most part certain, simple, and prominent, and calculated, perhaps, to render the diagnosis of the diseases of the lungs, heart and pleura, as decided and circumstantial, as the indications furnished to the surgeons by the introduction of the finger or sound, in the complaints wherein these are used.

In prosecuting my enquiries I made trial of instruments of various composition and construction. The general result has been that bodies of a moderate density, such as paper, wood, or indian cane, are best suited for the conveyance of sound, and consequently for my purpose. This result is perhaps contrary to a law of physics; it has, nevertheless, appeared to me one which is invariable.

I shall now describe the instrument which I use at present, and which has appeared to me

preferable to all others. It consists simply of a cylinder of wood, perforated in its centre longitudinally, by a bore three lines in diameter, and formed so as to come apart in the middle, for the benefit of being more easily carried. One extremity of the cylinder is hollowed out into the form of a funnel to the depth of an inch and half, which cavity can be so obliterated at pleasure by a piece of wood so constructed as to fit it exactly, with the exception of the central bore which is continued through it, so as to render the instrument in all cases, a pervious tube. The complete instrument, that is, with the funnel-shaped plug infixed—is used in exploring the signs obtained through the medium of the voice and the action of the heart; the other modification, or with the stopper removed, is for examining the sounds communicated by respiration. This instrument I commonly designate simply the Cylinder, sometimes the Stethoscope.” (fig 3)

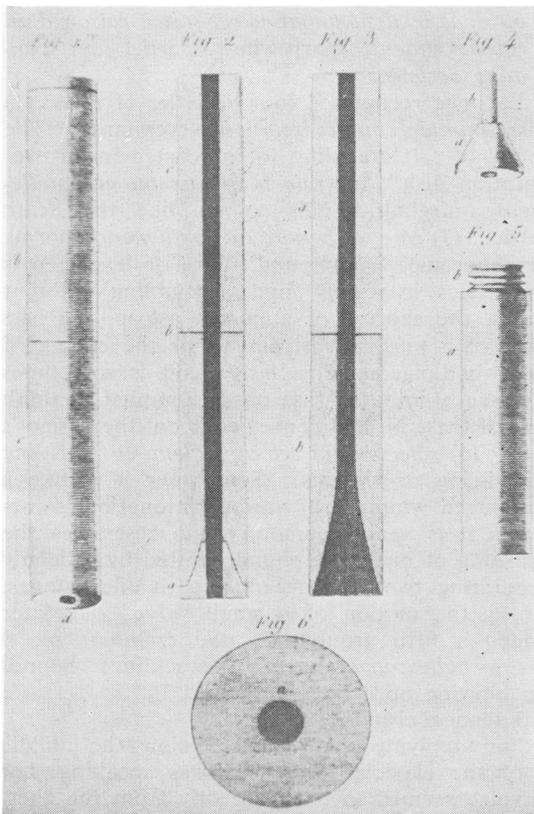


Fig 3 The stethoscope or cylinder. Plate VIII in Laënnec's *De l'Auscultation Médiate* (1819).

Laënnec chose the name *stethoscope* from the Greek *στήθος* chest and *σκοπε* to inspect.

De l'Auscultation Médiate

Using his method of *médiate auscultation* and correlating the physical findings of lung and heart disease with his necropsy findings, Laënnec acquired a vast clinical experience and was able to classify cardiorespiratory disorders along morbid anatomical lines. He now set to work on his masterpiece, *De l'Auscultation médiate*, completing it while he was very ill at Kerlouarnec. The book appeared on 15 August 1819, in two volumes, and 3500 copies were printed. The price was 13 francs, and a wooden stethoscope accompanied the volumes, price 2.50 francs (fig 4).

Laënnec begins the preface in modest vein:

“I began three years since the researches of which I now publish the results. Although these

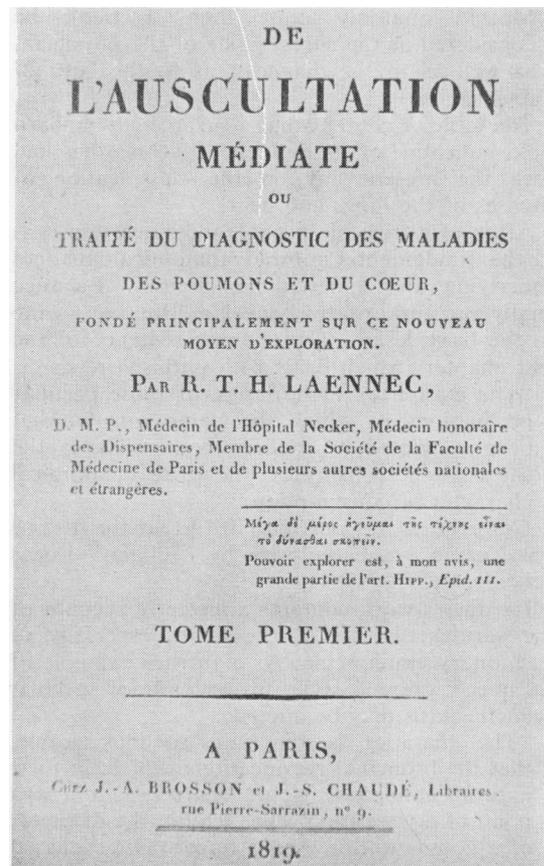


Fig 4 Title page of Laënnec's *De l'Auscultation Médiate* (1819).

have not reached the degree of perfection which longer experience would have conferred on them, I have thought it advisable, for many reasons, to communicate them to the public. Among those reasons I may mention—the incorrect accounts of my discoveries that have found their way into journals of the day; the favourable report of the Academy of Sciences; and the hope and conviction that the mode of exploration detailed in this work will be confirmed and extended by other observers.”

Regarding the pathological descriptions, Laënnec goes on to say:

“The great attention that has been paid to morbid anatomy since the commencement of the present century throughout Europe, and more especially in Paris, has been productive of many improvements, and discoveries which are but imperfectly known, and, indeed, many of which have not at all been communicated to the public, at least by their discoverers.

Morbid anatomy must then, I think be considered as the surest guide of the physician, as well as to the diagnosis as to the cure of diseases.”

The table of contents has a surprisingly modern look, indicative of the influence Laënnec has had until the present day on the classification of diseases of the lungs and heart.

After centuries of dispute and uncertainty as to the fundamental morbid anatomical changes underlying the tuberculous diseases, Laënnec finally and authoritatively declared the *tubercle* to be the basic lesion. The opening sentence of the first chapter (which deals with phthisis) reads:

“The existence, in the lungs, of those peculiar productions to which the name *tubercle* has been restricted by modern anatomists, is the cause, and constitutes the true anatomical character of consumption.”

However, it was not until 1839 that the disease was named tuberculosis by Johann Lucas Schönlein (1793–1864).

Laënnec’s work contains a masterly account of the various diseases of the lungs, especially of pulmonary emphysema. As a further example of Laënnec’s graphic style, his account of saccular bronchiectasis may be quoted:

“The dilatation is sometimes so considerable, that the bronchial ramifications, which, in their natural condition, would scarcely admit the point of a very fine probe, acquire the diameter of a goose-quill or even a finger. These dilated terminal portions terminate in culs-de-sac capable of containing a hempseed, a cherry stone, a filbert or even an almond.”

Laënnec’s classification of auscultatory sounds

We owe to Laënnec virtually the entire nomenclature of auscultation, although his terms have been considerably modified in recent times. After describing two varieties of normal breath sounds (pulmonary or vesicular, and bronchial) Laënnec proceeds to the *bruits étrangers* (adventitious sounds). In his writings and case notes, he uses the French term *râle* (or rattle) but because this might frighten his patients on account of its resemblance to *le râle de la mort* (the “death rattle”), he describes in the preface to the second edition of his treatise how he came to use the Latin equivalent *rhonchus* when discussing auscultatory findings at the bedside. Thus, for Laënnec, the French term *râle* and the Latin term *rhonchus* had the same meaning.

Laënnec wrote:

Et j’entends par râles tous les bruits contre nature que le passage de l’air, pendant l’acte respiratoire, peut produire soit en traversant des liquides qui se trouvent dans les bronches ou dans le tissu pulmonaire, soit à raison d’un rétrécissement [narrowing] partiel des conduits aériens.

Laënnec recognised four varieties of *râles*: (1) *râle humide ou crépitation* (crepitant) “The sound of salt crackling when roasted in an evaporation dish”; (2) *râle muqueux ou gargouillement* (gurgling) “This sounds like the death rattle”; (3) *râle sec sonore ou ronflement* (snoring or sonorous) “This sound, more or less deep is sometimes extremely loud, resembling different tunes, the snoring of a person asleep, the bass note of a musical instrument, or the cooing of the wood-pigeon. This last sound is sometimes so exactly imitated that one is tempted to think one of these birds is concealed about the patient’s bed”; (4) *râle sibilant sec ou sifflement* (whistling or hissing or sibilous) “Sometimes it is like a prolonged whimper of various intonation, sometimes it is very momentary and resembles the chirping of birds, the sound emitted by suddenly separating two portions of smooth oiled stones, or by the motion of a small valve.” He later added a fifth group: (5) *râle crépitant sec à grosse bulles ou craquement* (crackling) “Sounds on blowing up a dried bladder.”

Laënnec also found that

“on applying the cylinder below the middle of the clavicle, while she was speaking, her voice seemed to come directly from the chest and to reach the ear through the central canal of the instrument.”

He therefore called this *pectoriloquism* (speech

from the chest) and showed, by his morbid anatomical correlations, that this was a sign of lung cavitation.

Pleural friction he described as *bruit de cuir neuf* (creaking of new leather), and the peculiar voice-sound above a pleural effusion he christened *aegophony* (or caprine pectoriloquism). He described the voice coming from the chest in these cases as having “a trembling or bleating sound like the voice of a goat (*chevrottement*). It also resembles the sound of the human voice transmitted through a cleft reed, or the nasal intonations of the juggler speaking in the character of Punch.”

The metallic tinkling sometimes heard over a pneumothorax Laënnec graphically described as having “a striking resemblance to that emitted by a cup of metal, glass or porcelain, when gently struck by a pin, or into which a grain of sand is dropped.”

Laënnec’s attempt at classification of the heart sounds was not as complete as with the lung sounds. He described the first and second heart sounds, distinguished between hypertrophy and dilatation of the heart chambers, and laid emphasis on the strength of the heart sounds as a guide on whether or not to bleed the patient. He recognised cardiac irregularities caused by ectopic beats (although he failed to distinguish atrial fibrillation), and he described the *bruits* (murmurs) resulting from valvular disease. He made no mention, however, of the pericardial friction rub.

French reaction to *De l’Auscultation Médiante*

The first edition of 1819 sold badly, although most of Laënnec’s Parisian contemporaries soon came to accept his teachings. The stethoscope however was regarded by many as a source of jokes. More serious was the criticism levelled against the book by Francis Joseph Victor Broussais (1772–1838) who had quarrelled with Laënnec for some years. Laënnec was not put out by Broussais’s attacks of which he is reputed to have said—“J’ai souri comme un chasseur qui voit venir le lièvre.”

By the time that the considerably rewritten second edition appeared in 1826, Laënnec’s views were widely accepted, and the posthumous third (1831) and fourth (1837) editions sold more successfully. With the later improvements in the technique of clinical examination by Pierre Adolphe Piorry (1794–1879) and by Pierre Charles Alexandre Louis (1787–1872), *médiante auscultation* became standard practice in Paris; while

in Vienna, Joseph Skoda (1805–1881) carried out further refinement of auscultation, especially of the heart.

Another milestone in the story of auscultation was when Laënnec’s Breton friend and fellow student, Jacques Alexandre le Jumeau de Kergaradec (1787–1877) reported in 1822 hearing for the first time the foetal heart sounds and the uterine souffle on listening to the pregnant abdomen through a stethoscope.

English reaction to *De l’Auscultation Médiante*

The news of Laënnec’s teachings and discoveries drew many English physicians to Paris. Among them was the young Thomas Hodgkin (1798–1866), still a medical student, of whom Laënnec, in his list of foreign pupils, commented against Hodgkin’s name: “Assez bien”! Hodgkin brought a stethoscope back with him and demonstrated it at Guy’s Physical Society, the first to do so at that hospital. Another English physician who visited Laënnec in Paris was James Clark (1788–1870) who practised in Rome where he treated many consumptives including the poet, John Keats. Clark only partially accepted Laënnec’s ideas but he spoke of them to his friend John Forbes (1787–1861) who was at that time in practice in Penzance. Forbes went to Paris where he was so impressed by Laënnec’s discoveries that he decided to translate *De l’Auscultation Médiante* into English. In his translation, which appeared in 1821 (fig 5) Forbes took it upon himself to condense the work into one volume and rearranged the material into a first section dealing with pathology and a second dealing with diagnosis. Moreover, he modified Laënnec’s nomenclature of adventitious lung sounds, for which he was later criticised. However, Forbes’s work was of the greatest importance as it introduced Laënnec’s teachings and techniques of clinical examination to the English-speaking world. In his preface, he shewed his admiration for Laënnec:

“In short . . . he may be said to have realised the wish of the ancient philosopher, and to have placed a window in the breast through which we can see the precise state of things within.”

However, he appeared to be sceptical about the future usefulness of the stethoscope.

“I have no doubt whatever, from my own experience of its value, that it will be acknowledged to be one of the greatest discoveries in medicine by all those who are of a temper,

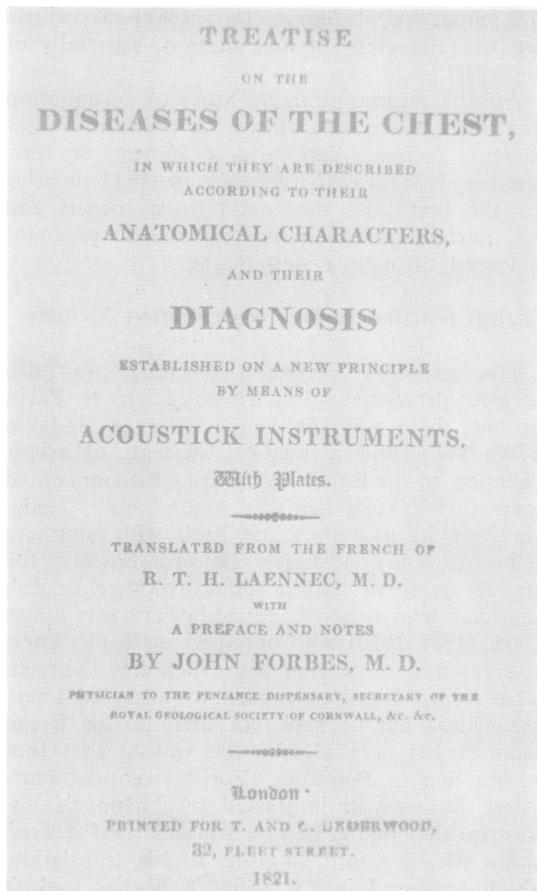


Fig 5 Title page of Forbes' translation *Treatise on the Diseases of the Chest* (1821).

and in circumstances, that it will enable them to give it a fair trial. That it will ever come into general use, notwithstanding its value, I am extremely doubtful; because its beneficial application requires much time, and gives a good deal of trouble both to the patient and the practitioner; and because its whole hue and character is foreign, and opposed to all our habits and associations. It must be confessed that there is something even ludicrous in a grave physician formally listening through a long tube applied to the patient's thorax, as if the disease within were a living being that could communicate its condition to the sense without. Besides, there is in this method a sort of bold claim and pretension to certainty and precision of diagnosis, which cannot, at first sight, but be somewhat startling to a mind deeply versed in the knowledge and uncertainty

of our art, and to the calm and cautious habits of philosophising to which the English physician is accustomed."

Nevertheless *médiate auscultation* was soon universally adopted in England, further modification of Laënnec's methods being made by Peter Mere Latham (1789–1875), Francis Hopkins Ramadge (1793–1867), and Charles James Blasius Williams (1805–89); while William Stokes (1804–78) pioneered the stethoscope in Dublin, especially in the diagnosis of cardiac disorders.

Laënnec's final years and death

In 1820, ill health took Laënnec back to Kerlouarnec, but in the following year he returned to Paris where his opinion and advice were even more widely sought and he was honoured when Madame La Duchesse de Berry became his patient. In 1822, he became Regius Professor of Clinical Medicine at the Collège de France and was engaged in reorganising the Medical Faculty of the University of Paris. In 1823 he was elected full member of the French Academy of Medicine; also in that year he left the Necker Hospital, which had been the scene of his greatest discoveries, and transferred to the Charité Hospital where he was Professor of Clinical Medicine. He now had charge of five wards and distinguished physicians from abroad flocked to his lectures and demonstrations (fig 6). In 1824 he was honoured with the Order of Chevalier de la Légion d'Honneur.

Until this stage in his life, Laënnec had remained a bachelor, but in 1824 he married a widow, Madame Argou, formerly Jaquette Guichard. He was aged 43 years, she was 45. She was an old friend and latterly had become his housekeeper, but in order to put an end to gossip, Laënnec decided to marry her. Laënnec was extremely happy with Jaquette, although their married life was destined to be all too short. She became pregnant but miscarried, and Laënnec was brokenhearted. He became more ill, yet continued to work on the second edition of his great treatise, which was published in 1826. This work incidentally contained the description of atrophic scarring of the liver, which later came to be known as "Laënnec's cirrhosis".

In June 1826, Laënnec returned to Kerlouarnec for the last time. He was now in the final stages of his long fight against phthisis, and on 13 August 1826 he breathed his last. As he lay on his deathbed, he took off his rings, placed them on a bedside table, doing so "because someone would soon have to render me this

service, I wish to spare him this painful task.” Laënnec was buried in the cemetery on the cliffs near Ploaré, and the horizontal grey granite slab over his grave bears the following inscription:

ICI REPOSANT
RENÉ THÉOPHILE HYACINTHE
LAËNNEC
MÉDECIN DE S.A.R.
MADAME LA DUCHESSE DE BERRY
LECTEUR ET PROFESSEUR ROYAL EN MÉDECINE
AU COLLÈGE DE FRANCE
PROFESSEUR DE CLINIQUE A LA FACULTÉ DE PARIS
MEMBRE DE L'ACADEMIE ROYALE DE MÉDECINE
CHEVALIER DE LA LEGION D'HONNEUR
NÉ À QUIMPER EN 1781
MORT À KERLOUARNEC LE 13 AOÛT 1826
ET
DAME JAQ. GUICHARD
SON ÉPOUSE
NÉE À BREST EN 1799
MORTE À KERLOUARNEC
LE 2 AOÛT 1847
PRIEZ POUR EUX

Conclusion

On the occasion of the bicentenary of the birth of Laënnec we pay homage to this brilliant Breton physician, whose painstaking clinical and morbid anatomical studies served to unravel many of the mysteries of thoracic disease and especially tuberculosis, the disease from which he himself suffered and which cut short his life. His great achievements, despite his prolonged personal battle against tuberculosis, will serve as an inspiration to physicians for all time. By his invention of the stethoscope and his *De l'Auscultation Médiante*, one of the great medical classics, Laënnec became one of the immortals in the history of medicine. Every physician who auscultates his patient becomes, by this act alone, a disciple

of Laënnec. A doctor-poet of our time, Danny Abse, has written of the stethoscope—

“Through it
Over young woman’s abdomen tense,
I have heard the sound of creation
And, in a dead man’s chest, the silence
Before creation began.”

General bibliography

- Auenbrugger L. *Inventum novum ex percussione thoracis humani*. Vienna: Trattner, 1761.
- Bayle GL. *Recherches sur la phtisie pulmonaire*. Paris: Gabon, 1810.
- Bichat X. *Anatomie générale appliquée à la physiologie et à la médecine*. Paris: Brosson and Gabon, 1801.
- Bishop PJ. An exhibition of material relating to RTH Laënnec (Unpublished), 1972.
- Bishop PJ. Evolution of the stethoscope. *J R Soc Med* 1980; 73:448–56.
- Broussais FJV. *Examen de la doctrine médicale généralement adoptée et des systèmes modernes de nosologie*. . . . Paris: Mequignon-Marvis, 1816. Second edition, 1821.
- Corvisart JN. *Essai sur les maladies et les lésions organiques du coeur et des gros vaisseaux*. Paris: Mequignon-Marvis, 1806.
- Corvisart JN. *Nouvelle méthode pour reconnaître les maladies internes de la poitrine, par la percussion de cette cavité*. Paris: Migneret, 1808.
- Forbes J. Original cases with dissections and observations illustrating the use of the stethoscope and percussion in the diagnosis of diseases of the chest; also commentaries on the same subjects translated from Auenbrugger, Corvisart, Laënnec, and others. London: Underwood, 1824.
- Forgacs P. *Lung sounds*. London: Baillière Tindall, 1978.
- Kergaradec JA le Jumeau de. *Mémoire sur l'auscultation appliquée à l'étude de la grossesse, ou recherches sur deux nouveaux signes propres à faire reconnaître plusieurs circonstances de l'état de gestation*. Lu à l'Académie Royale de

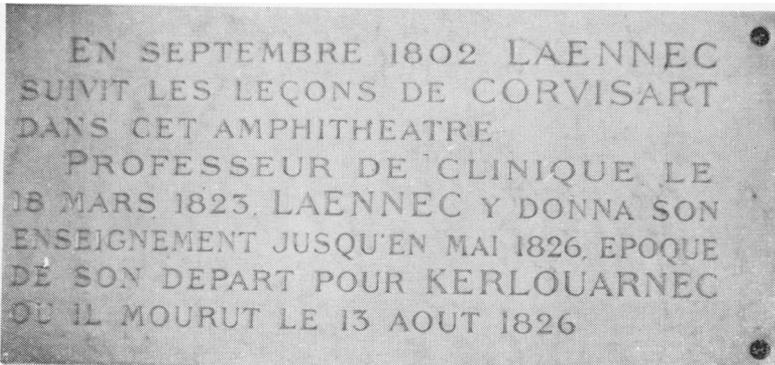


Fig 6 Plaque outside Amphitheatre Laënnec in Hôpital de la Charité, now situated in Nouvelle Faculté de Médecine, Paris.

- Médecine dans la séance générale de 26 Decembre 1821.* Paris: Méquignon-Marvis, 1822.
- Kervran R. *Laënnec: his life and times.* Translated by Abrahams-Curiel DC. Oxford: Pergamon Press, 1960.
- Louis PCA. *Recherches anatomico-pathologiques sur la phthisie.* Paris: Gabon, 1825.
- Piorry PA. *De la percussion médiate.* Paris: Chaudé et Baillière, 1828.
- Rist E. *La jeunesse de Laënnec.* Fourth edition. Paris: Gallinard, 1955.
- Rouxau A. *Laënnec avant 1806.* Paris: Baillière, 1912.
- Rouxau A. *Laënnec après 1806.* Paris: Baillière, 1920.
- Sakula A. Auenbrugger: opus and opera. *J R Coll Phys* 1978; **12**:180-8.
- Sakula A. Pierre Adolphe Piorry (1794-1879): pioneer of percussion and pleximetry. *Thorax* 1979; **34**: 575-81.
- Sakula A. In Search of Laënnec: a pilgrimage to Quimper, Nantes, and Paris. *J R Coll Phys* 1981; in press.
- Sakula A. Joseph Skoda (1805-1881): a centenary tribute to a pioneer of thoracic medicine. *Thorax* 1981; in press.
- Skoda J. *Abhandlung über Perkussion und Auskultation.* Vienna: Mösele and Braumüller, 1839.
- Stokes W. A treatise on the diagnosis and treatment of diseases of the chest. Dublin: Hodges and Smith, 1837.
- Williams CJB. A rational explanation of the Physical Signs of Diseases of the Lungs and Pleura: illustrating their Pathology and Facilitating their Diagnosis. London: Underwood, 1828.

Appendix

DE L'AUSCULTATION MÉDIATE—French editions.

First edition Two volumes.

De l'auscultation médiate ou traité du diagnostic des maladies des poumons et du coeur, fondé principalement sur ce nouveau moyen d'exploration. Paris: Brosson et Chaudé, 1819.

Second edition Two volumes.

Traité de l'auscultation médiate et des maladies des poumons et du coeur. Paris: Chaudé, 1826.

Third edition Three volumes.

Traité de l'auscultation médiate et des maladies des poumons et du coeur. Augmentée de notes par Meriadec Laënnec. Paris: Chaudé, 1831.

Fourth edition Three volumes.

Traité de l'auscultation médiate et des maladies des poumons et du coeur. Avec les notes et additions de M M Laënnec . . . considérablement augmentée par M Andral. Paris: Chaudé, 1837.

DE L'AUSCULTATION MÉDIATE—English editions by John Forbes.

First edition.

A treatise on the Diseases of the Chest, in which they are described according to their anatomical characters, and their diagnosis established on a new principle by means of acoustick instruments. London: Underwood, 1821.

Second edition.

Based on French second edition with portrait of Laënnec. 1827.

Third edition.

A revision of French second edition. 1829.

Fourth edition.

Based on French third edition. 1834.

Note in this paper, the quotations (in English) from *De l'Auscultation Médiate* are all based on Forbes' first edition (1821).