

The forgotten stories on patients who made history

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ABSTRACT

Basic books on medical eponyms, history of medicine or medical dictionaries, describe usually the historical contribution of scientists and physicians. It is impossible to ignore the role of patients in some medical discoveries. Some diseases have been named after the person who first described the condition. Sometimes diseases are

named after a place (Bornholm disease, Lyme disease, Ebola hemorrhagic fever) and even societies (Legionnaires' disease). Rarely a disease was named after a patient. In this short article I describe my collection of a few relatively unknown medical stories and the patients behind them.

Key words: medical eponyms, history, medicine, patients

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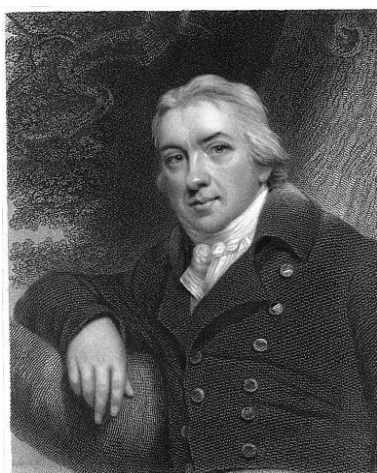
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INTRODUCTION

Being awarded an eponym is regarded as an honor in science or in medicine: "*eponymity, not anonymity, is the standard*" [1].

Seldom, patients were mentioned in the medical literature by their physicians, who made important medical achievements and cordially acknowledged their gratitude to these patients.

In May 1796, a cowpox epidemics spread over large areas in England. With much courage, Dr. Edward Jenner [1749-1823], obtained consent for a risky and courageous experiment from the parents of an eight year old boy, James Phipps.



Dr. Edward Jenner [1749- 1823] [2]

So, it is apparent, that Jenner, hundred years before the public awareness of "*codes of ethics of human experimentations*", behaved correctly while he obtained permission from James Phipps' parents.

James has no known history of cowpox or smallpox. On May 14, 1796, Jenner took some pus from Sarah Nelmes, who had fresh scars of cowpox on her finger, Jenner smeared it over scratches he had made on the boy's arms. After a week, the boy developed fever and then recovered shortly afterward.

Jenner used James as a living demonstration for about 20 years. He repeatedly inoculated James with smallpox to prove that he was permanently immune and employed James as an assistant gardener. James remained on good relations with Jenner [3, 4].

Jenner's experiments caused much debate among the physicians, but after the remarkable outcome, Jenner was honored and became famous. James Phipps had a long life (1788 - 1853). Louis Pasteur honored Jenner by coining the process "*vaccination*", for the vaccinia virus of cowpox (*vache*, a cow in French).

The physical sign of "*shaking of the whole body synchronous with the heartbeats, with jerking movements of the head and neck*" , is called de Musset's sign, after Louis Charles Alfred de Musset (1810-57) French Romantic dramatist and poet, who suffered from severe aortic insufficiency. Alfred de Musset himself described it in his poem "La nuit de mal". Once he wrote: "Reason may cure illusions, but not suffering" [5-8].



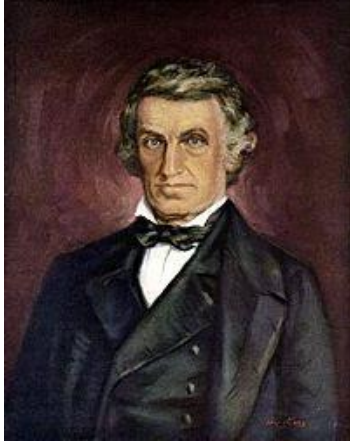
Louis Charles Alfred de Musset (1810-57) [9]

The story of Alexis St. Martin, and William Beaumont (1785 – 1853) is remarkable. From 1812 until 1815, Beaumont served as a surgeon's mate in the army during the 1812 War [12-14].



Alexis St. Martin, age 67 [10]

After the war, he started a private practice in Plattsburgh, New York, and in 1819 surgeon Beaumont returned to active military service at Fort Mackinac. On June 6, 1822, Alexis St. Martin was accidentally shot in the chest and abdomen. St. Martin survived this severe penetrating injury [12-14].



William Beaumont [11]

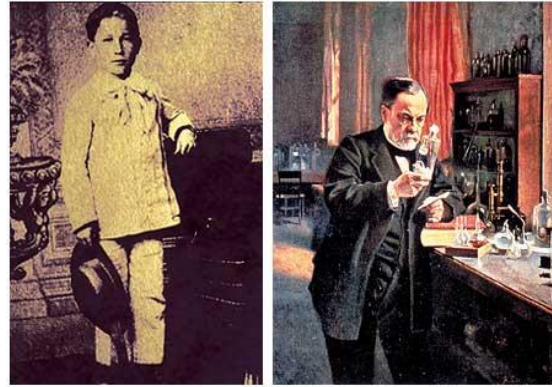
Dr Beaumont treated his wound which later developed a fistula [12- 14]. With an open hole in his abdominal wall, the poor patient cannot return to his previous job, so the good doctor took him as a handyman. Beaumont recognized that he had a unique opportunity to observe digestive processes through that hole. A series of experiments made finally Beaumont famous as the "Father of Gastric Physiology" following his research on Alexis St. Martin digestion. The surgeon remained in the military service until 1832. After three sets of "live" chemical experiments, Beaumont published his book [12-14].

St. Martin died in 1880: *"Beaumont and St. Martin lived through an important period of transition in which personal master-servant relations existed alongside the "free" contract labor of market capitalism. Their relationship reflected and helped constitute important developments in nineteenth-century American labor history"* [13].

Louis Pasteur (1822 – 1895) was a French chemist and microbiologist who is remembered for his remarkable breakthroughs in the causes and preventions of diseases and inventing methods to prevent milk and wine to ferment, a process that is called "pasteurization" . He created the first vaccine for rabies and anthrax. The vaccine against rabies was first used on 9-year old Joseph Meister, after the boy was injured by a rabid dog. Pasteur, who was not a physician, took a huge risk. Pasteur saved the boy's life [15 - 17].

"Pasteur immediately consulted Edmé Félix Alfred Vulpian (1826-1887), a member of the rabies commission, and Jacques-Joseph Grancher (1843-1907), who worked in his laboratory. Both considered young Meister doomed; and after Pasteur told them of his new results, both urged him to use the new method on the boy. The treatment, begun that evening, July 6, 1885, lasted ten days, during which Meister received thirteen

abdominal injections derived from progressively more virulent rabbit marrows.



Dr. Simone Brutlag

National Library of Medicine

Louis Pasteur (1822 – 1895) & Joseph Meister (1876-1940) [18]

By the end of the treatment, Meister was inoculated with the most virulent rabies virus known, that of a mad dog augmented by a long series of passages through rabbits. Nonetheless he had remained healthy during the nearly four months since he had been bitten, and his recovery therefore seemed assured. It is said that Pasteur suffered great mental qualms, and hardly was able to sleep or work during the period he treated the boy" [17].

Joseph Meister (1876-1940) remained at "l'Institut Pasteur" as a gardener and handyman. Later on, he kept the keys of the Pasteur's Mosoleum at the Institute. When the Germans entered Paris, he committed suicide. The 14 year-old Jean-Baptiste Jupille, (1869 – 1923) was the second boy who was immunized by Pasteur, after being bitten by a dog. He was employed at the Institute as a concierge .

Pasteurization is a process of making foods stay fresh. The first pasteurization was done by Louis Pasteur and Claude Bernard on April 20, 1862.

These were real patients with their real names. But there are numerous anonymous patients that were hidden behind their doctors' eponyms. For example, the Wolff-Parkinson-White syndrome is named after Sir John Parkinson, Paul Dudley-White and Louis Wolff but apparently, it was first described by Frank Norman Wilson (1890-1952) in 1915 and by Wedd in 1921 on two young patients whose names are not known.

Princess Marie Bonaparte (1882-1962) was one of the first female French psychoanalysts.

Together with Rudolph Loewenstein (1898-1976) they analyzed their first patients - the journalist-writers Alice and Valerio Jahier. Valerio doubted the efficiency of the treatment and eventually committed suicide in 1939 [20, 21].

Silas Weir Mitchell was an American physician-neurologist and author (1829- 1914).



Princess Marie Bonaparte (1882-1962) [19]

Mitchell's war experiences were the basis of many of his poems, among them „The Case of George Dedlow" (1866, a story about a (fictional?) [22] quadruple amputee, a military Assistant-Surgeon. At the beginning, the poem was printed, anonymously, in the "Atlantic monthly". George Dedlow, awakening following battle trauma and surgery, is unaware of his missing legs [22].



Silas Weir Mitchell (1829- 1914) [23]

He asks an orderly to massage his leg in order to relieve pain. "I was suddenly aware of a sharp cramp in my left leg. I tried to get at it with my single arm, finding myself too weak, hailed an attendant "just rub my left calf..if you please". " calf?.. you ain't got none, partner. It's took off."

In 1871, Mitchell coined the term "phantom limb" which is in use, and still enigmatic, until today. The "Weir Mitchell treatment" was a method of treating "neurasthenia, hysteria" (shell

shock), by rest in bed, frequent and abundant feeding, and the systematic use of massage and electricity.



Henry Bence Jones (1813-1873) [24]

Of the three physicians that took care of Thomas Alexander McBean in 1844-6, was Henry Bence Jones, physician and chemist (1813-1873) who studied medicine at St. George's Hospital in London [25]. McBean was a highly respectable tradesman, who developed weakness, fatigue, chest pain, and general physical deterioration. He consulted with Thomas Watson and William Macintyre, who prescribed phlebotomy, leeches, cups, hydrotherapy and so forth. In one occasion, when the distinguished physicians observed some changes in the patient's urine, they sent Bence-Jonce the urine for chemical analysis. He found "albuminuri" [25]. Apparently, this was the diagnosis of multiple myeloma.

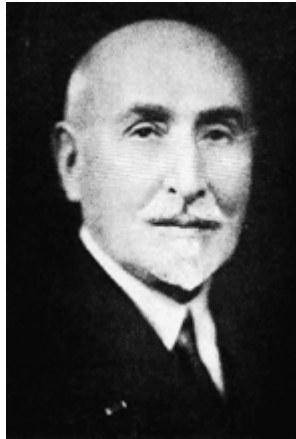
Mrs. Mortimer was Jonathan Hutchinson's patient, and this term has been used as a synonym for Boeck's sarcoid (Cæsar Peter Møller Boeck, 1845-1917, a Norwegian dermatologis). She had a dermatologic disease characterized by raised, dusky-red patches that spread slowly in an almost symmetrical pattern. Sir Jonathan Hutchinson (1828-1913) was an English surgeon and pathologist.

In 1896 the French pediatrician, Antoine Bernard-Jean Marfan, (1858-1942) presented the case of a 5-year-old girl, Gabrielle P, to the *Société Médicale des Hôpitaux de paris*. He described her congenital disproportionately long limbs. Her fingers and toes were described as "*pattes d'araignée*", [spider's legs], and he called the condition "dolico-stenomele". The died perhaps due to consumption patient.

Retrospectively, medical historians thought that Gabrielle had been born with congenital contractural arachnodactyly.

In 1902 Henri Méry (1782-1927) and Léon Babonneix (1876-) reexamined Gabrielle with the aid of newly developed radiography. They noted also dorsal spine deformity and thoracic asymmetry, calling the condition "*hyperchondro-*

plasia". Later on, the cardiovascular and ocular abnormalities the syndrome were added. Emile Charles Achard, (1860-1944), was a professor of internal medicine at the University of Paris, Hôpital Beaujon and Cochin. In 1902, he reported on a girl with «*arachnodactyly*», articular hypermobility and a familial nature of her condition [26].



Antoine Bernard-Jean Marfan, (1858-1942) [26]

Today we know that Achard's patient had the "real" "Marfan syndrome", while Marfan's patient, Gabrielle, perhaps was born with "congenital contractural arachnodactyly".

Achard syndrome is defined as an inherited connective tissue disorder characterized primarily by a short head, long, slender bones, recessed lower jaw and loose hand and foot joints.

The famous case of Sigmund Freud, "Anna O", (Bertha Pappenheim 1859 – 1936), was immortalized many times in the literature. Freud's friend, Dr. Josef Breuer (1842-1925) introduced him with a 21 year old woman [27, 28].



Dr. Josef Breuer [29]



Anna O (Bertha Pappenheim) 1859 – 1936) [30]

She was a very intelligent patient, who developed a series of physical and psychological disturbances: rigid paralysis, alternate left and right hemi-anesthesia, nervous coughs, disturbances of sight and body posture. She was treated with psychotherapy over a prolonged time. In 1893 Breuer and Freud summed up their joint explorations of this form of psychotherapy in *Studien über Hysterie* [27, 28].



Pierre Paul Broca (1824 – 1880) [33]

In 1861, the French eminent surgeon-anatomist Pierre Paul Broca (1824 – 1880) examined a patient, named Leborgne, at the Bicêtre Hospital. He had suffered from a progressive loss of speech and paralysis but not a loss of comprehension nor mental function. When Leborgne died, Broca performed an autopsy. He found that Leborgne had a lesion in the frontal lobe of the left cerebral hemisphere. This point in history

is the beginning of the field of study of communication disorders [31, 32].

There are other examples of rare diseases, syndromes or phenomenae named after patients: i.e., Chido blood group system, Diego antigen, Fitzgerald trait and Auberger blood group.

Stephen Christmas [1947-1993] was born in London. He emigrated to Toronto, Canada with his family. Haemophilia was diagnosed at the Hospital for Sick Childre [34]. The family returned to London in 1952 to visit their relatives, and during the trip Stephen was admitted to a hospital. A sample of his blood was sent to the Oxford Haemophilia Centre, where Rosemary Biggs (1912-2001) and R.G. McFarlane discovered that he was not deficient in Factor VIII, but a rather factor IX. In his honor the factor received the name *Christmas factor* [34].

Stephen studied photography at the Ryerson Institute of Technology (now Ryerson University) Toronto. He worked as a taxicab driver after graduation and was employed for some years as a medical photographer at the Hospital for Sick Children in Toronto. Stephen was dependent on blood and plasma transfusions, and was infected with HIV in the period during which blood was not routinely screened for this virus. He became an active worker for the *Canadian Haemophilia Society* and campaigned for transfusion safety ever since getting infected, but developed AIDS, of which he died in 1993.



William Beecher Scoville (1906 - 1984) [37]

The hippocampus, parahippocampal gyrus, and amygdala were surgically removed from the American, Henry Gustav Molaison (1926 – 2008), [known as H.M.] , by William Beecher Scoville, (1906 - 1984) a neurosurgeon at Hartford Hospital, in an attempt to cure his epilepsy. He was widely studied by many investigators from 1957 until his death. He played a very important role in the development of cognitive neuropsychology [35, 36].

Amyotrophic lateral sclerosis (ALS), motor neurone disease or Lou Gehrig's disease is a devastating and debilitating disease. It is characterized by rapidly progressive weakness, paralysis, muscle atrophy and fasciculations, muscle spasticity, dysarthria, dysphagia, and dyspnea [26]. Henry Louis "Lou" Gehrig (June 19, 1903 – June 2, 1941) was an American baseball first baseman who played 17 seasons in Major League Baseball (MLB) for the New York Yankees (1923–1939). After his death from this dreadful disease, this rapidly progressive degenerative disorder was named after his name [38].

The last patient in this list, did not become "an eponym" or stood behind any medical discovery, but rather became a symbol of unnecessary war, injury and suffering [38]. On June 8, 1972, a plane of the South Vietnamese Air Force bombed the village of Trang Bang, near Saigon (now Ho Chi Minh City) in South Vietnam. The picture of the burnt –crying, 9-year-old Kim Phuc Phan Thi, taken by Pulitzer Prize-winning photographer Nick Ut shook the whole world. Ut took Kim Phuc and the other injured children to Barseky Hospital in Saigon. She spent 14-month in the hospital and underwent 17 surgical procedures [38].



Henry Louis "Lou" Gehrig (June 19, 1903 – June 2, 1941) [39]

She began her medical studies, but Phúc was forced to leave university and was used as a symbol by the communist government. In 1986, she was permitted to continue her studies in Cuba [38]. In 1992, Phúc and her husband, during a flight-stop in, Newfoundland, left the plane and asked for political asylum in Canada, where they live today. In 1996, Phúc met the surgeons who had saved her life [39]. Last remark: Harry Raymond Eastlack, Jr. (1933 – 1973) suffered from *fibrodysplasia ossificans progressive* (FOP), a rare disease in which the bone repair mechanism is disturbed, turning muscles and tendons into osseous tissue. Eastlack permitted his skeleton to be preserved for

scientific research, and it is today on display at the Mütter Museum of The College of Physicians of Philadelphia.

CONCLUSIONS

Names of diseases syndromes, phenomena, procedures or devices, are called usually after physicians or scientists. Sometimes, they are called after the area or city where the discovery was made. Rarely, we hear about the real patients behind the discovery or of the disease. I trust that my collection of patients, who entered the books of history of medicine, is not complete and I hope others will add more important stories about those brave patients. Medical education programs should contain these stories.

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