

On *Plica Polonica* and the forgotten Joseph Romain Louis Kerckhoffs (1789- 1867)

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ABSTRACT

Plica Polonica (or Plica Neuropathica) is a rare hair disorder, an acute hair felting. The one who described this phenomenon thoroughly and who has been almost totally absent in history-of-medicine textbooks, is the French - Dutch physician,

Joseph Romain Louis Kerckhoffs (or Kerckhove) (1789 - 1867).

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*Blanket my loins: elf all my hair in knots
(W. Shakespeare's "King Lear,"
Edgar in Act II, Scene III)*

INTRODUCTION

Medical eponyms are usually named after physicians, scientists, causative agents, saints, and rarely after "famous" patients [1].

Occasionally, one can encounter with a (recent or archaic term) disease or syndrome which were coined after a city, country, river, an area, or an island: "the French disease", "the Italian disease", Guinea Worm, West Nile Virus, German Measles, Ebola Hemorrhagic Fever, Marburg Virus Disease, St. Louis Encephalitis, Rocky Mountain Spotted Fever, Lyme Disease, Meleda disease and more. Less known is a dermatologic term: "*Plica Polonica*". This rare phenomenon is mentioned today only 19 times on PubMed site.

The Dermatological Problem

Plica Polonica (or *plica neuropathica*) is a rare hair-disorder, an acute hair felting, which is associated with lice eggs on hair, chemotherapy, azathioprine-induced pancytopenia, seborrheic dermatitis, schizophrenia, after use of shampoo, rupoid psoriasis, trichoma, pediculosis capitis and scabies. It is "*characterized by irreversible twisting and matting of hair resulting in a hard impermeable mass of keratin... it has been attribute to longitudinal splitting or weathering of hair shaft due to vigorous friction and frequent use of harsh shampoos and harsh cleansers and/or due to keeping long hair with poor hair care or neglect, parasitic infection*" [2].

"Acute hair felting is a rare disorder of scalp hair. In this condition, the hair becomes twisted, entangled as a hard stony mass resembling a bird's nest. Sudden hair matting has been reported earlier

in the literature after vigorous use of chemical and herbal shampoos. Plica polonica is a patchy area of hair matting occurring in due course of time in neglected hair or underlying psychiatric illness" [3].

The basic textbook on history of medicine [4] says: "*plica polonica, the unsightly disease of matted hair, introduced into Poland by the Mongol invasion, 1287*".

Le Page and Kerckhoffs

A physician from Manchester, JF Le Page, coined the term *plica neuropathica* in 1884 but he did not mention the one who described thoroughly the phenomenon and who is almost totally absent in history of medicine textbooks: the French-Dutch physician, Joseph Romain Louis Kerckhoffs (or Kerckhove) (1789- 1867) [5].

He was the only son of Marie-Gertrude Lindge-Kerckhoffs (1767-1841), and Jean-François Kerckhoffs (1748-1819). His father was a surgeon and a mayor of Nuth, Holland, and gave his son an home education by a Jesuit Monk. By his father suggestion, he left to Heidelberg and Strasbourg to study law. But he chose medicine. He got his MD degree in 1811. His dissertation was on: "*l'air atmospherique et son influence sur l'économie animale*". In 1814 he got married to Grégorine-Anne-Marie Chapuis in Maestricht [5-6].

The "*Larousse Dictionnaire historique des Me'decins*" described him as follows [7]: "*Joseph Kerchove Van der Varent, chirurgien militaire belge (Nuth 1789-Malines 1867). Chirurgien de l'arme'e napoleonienne en Russie, en Allemagne et en France, il sert ensuite les Pays-Bas et devient me'decine-chef du service de sante' militaire d'Anvers . Son fils Euge'ne fut un politicien connu*".

In 1833, he changed his name to "De Kerckhove" [8].



Joseph Kerckhoffs [9]

As a military surgeon, ("*ancien médecin*

en chef des hôpitaux militaires, commandeur et

chevalier de plusieurs Ordres de mérite, commandeur de l'Ordre noble du phénix de Hohenlohe, chevalier de l'Ordre du Saint-Sépulcre de Jérusalem, etc."), he served the Napoleonic French Army between 1812-15, when Holland was annexed to France. After 1815 he was in charge of the military hospitals in Holland.

He published books on public health and fought against charlatanism. In 1842 he founded the "*Academie d'Archeologie de Belgique*". His last days were spent with his son Eugène de Kerckhove, the mayor of Mechelen, and died at 78 years of age. It is interesting to note, that although he served the French army in high medical positions (under Marshal of the Empire Michel Ney and Victor van Bellune, Claude Victor-Perrin, First Duc de Belluno), the Prussians invited him after

Napoleon fall, to serve as the chief medical officer of their army! But he chose to return to a much lower positions, in the Low Countries (Holland and Belgium were united from 1815 to 1830). He worked in Lie'ge and Antwerpen until he retired in 1823. After his military service he devoted himself to help the poor, and fought against King Willem the 1st order to close down hospitals because of economic reasons. Prince Frederick asked him to consult "welfare-villages " and to fight against contagious diseases. He wrote his epidemiological experience in his "Memoires de Cholera" [8].

On a genealogical site [10], he appears as: Josephus Kerckhoffs, *Comte du Royaume des deux Siciles 1789-1867*, Ancestry Chart, Descendancy Chart.

Jean François Kerckhoffs 1748-1819	Marie Gertrude Lindgens 1767-1841	Alexandre Joseph Chapuis 1763-1837	Marie Hélène Bours 1751-1831	Pierre de Peñaranda , <i>Seigneur de</i> <i>Franchimont</i> 1764-1823	Thérèse Wynckelman 1772-1825	
8	9	10	11	12	13	
Josephus Kerckhoffs, <i>Comte du Royaume</i> <i>des deux Siciles</i> 1789-1867		Anne-Marie Chapuis 1794-1884		Désiré de Peñaranda de Franchimont 1799-1863		Rosamonde Spong 1797-1872
4		5		6		7
Antoine de Kerckhove , <i>Vicomte de Kerckhove</i> 1817-1889				Marie de Peñaranda de Franchimont 1832-1912		
2				3		
Louis de Kerckhove dit van der Varent 1879-1958						

Dr. J. R. L. Kerckhove had published many books [11,12]: among them - "*Observations médicales faites pendant les Campagnes de Russie en 1812 et d'Allemagne 1813*" [12]; "*Hygiène militaire, ou, Avis sur les moyens de conserver la santé des troupes : ouvrage pour le service de terre*" 1815-23; "*Histoire des maladies observées à la Grande Armée française, pendant les campagnes de Russie en 1812*

et d'Allemagne en 1813"; "*Hygiène militaire, à l'usage des armées de terre 1823*"; "*Considérations sur la nature et le traitement du choléra-morbus, suivies d'une instruction sur les préceptes hygiéniques contre cette maladie*"; "*Considérations pratiques sur les fièvres intermittentes, avec des avis sur les moyens de*

s'en préserver dans les localités humides et marécageuses 1825"; Notes d'un voyage fait en Espagne"; "Statuts De L'ordre Chapitral D'ancienne Noblesse Des Quatre Empereurs D'Allemagne Langue Germanique Ou Primitive" [12,13].

In one of his books [13], he had described the plica polonica.

Sir Dominic John Corrigan (1802–1880), was an Irish physician, who described the abnormal "collapsing" pulse of aortic valve insufficiency – the Corrigan's pulse, in The Cyclopaedia of Practical Medicine, he gave a full-lengthy description of the plica polonica phenomenon [14]: "*Plica Polonica, from plico, to knit together. This disease derives its name from the manner in which the hair is plaited or matted together is of most frequent occurrence in Poland...in Tartary, among Cossacks of Russia, in Hungary and in a few instances in Switzerland and France. Schlegel, a physician practicing in Moscow, who published a work on plica in 1806, gives a singular account of its origin. the prejudice in favour of plica is extended even to inferior animals...the physicians of Poland have not escaped the contagion of the prejudice. Kerckhoff whose observations were made during the stay of the French army in Poland, related a case illustrative of this. ...*" [14].

Corrigan actually reviewed the literature. He mentioned other physicians and surgeons, who examined "patients" with the plica: Napoleon's chief surgeon - J.D. Larrey, Lafontaine Robin (surgeon to Frederick the Great), Francois Pierre Chaumeton, Mouton and more. He cited a Scottish physician, William Davisson (1593-1669) "*the physician to the Polish king John Casimir and the queen Marie Louise, wrote that plica polonica was due solely to uncleanliness and lack of care of hair*" [1668], that he treated successfully 10000 patients with plica!? [15].

Baron Larrey added that sometimes patients with plica, complained about bone and joints' pain. "*Schlegel (1806) reviewed the literature (on plica polonica) of the previous 200 years and listed 136 papers, dissertations and monographs from different authors... Schlegel wrote that trichoma had a lethality of 5%, leaving 45% of the affected crippled and with 50% making a full recovery. He felt that trichoma was the true cause of up to 32 000 of 55 000 deaths per year. The estimated prevalence was 1:10 to 1: 30*" [16].

F.L. de La Fontaine, Counsellor and Surgeon to the King, wrote: "*Plica Polonica, a disease endemic in Poland, and its neighboring countries, in which morbid matter is critically deposited upon the hair, and binds it together in such a manner, that to unravel it is impossible.*

Experience shows, that it is contagious, and very often congenital. There is no certainty where it first arose; the Arabians, Greeks and Romans, do not mention it; but some modern (19th Century) writers make the date of its origin, 1387, and add, that it came from Tartary" (in 1808) [17,18].

Many kinds of treatments were suggested: shaving (presumably, when the etiology of plica was "dirt"), partial cutting of hair and "eliminating *virus trichomaticus*"! we have no idea what was really suggested in this last "method" [18].

An ancient explanation for the plica phenomenon was put [15]: "*Most authors ascribe it to uncleanliness, which is no doubt the ordinary exciting cause, though there seem to be others of equal efficiency. It is also very generally affirmed to be contagious; and i had hence added this character to the disease in the volume of Nosology. But as Dr. Kerckhoffs strenuously maintains the contrary, after a very minute attention to the complaint in Poland itself, and more especially after having in vain endeavoured to inoculate first himself, and then two children, from the matter issuing from the bulbs of hair pulled for this purpose from a boy who was suffering from it in the most loathsome manner, I have here withdrawn the symptom. Dr. Kerckhoffs reduces plica to a much simpler principle than it has hitherto been described under, and strips it of many of the most formidable features by which it has been characterized; particularly its connexion with hectic fever, or any idiopathic affection of the brain... He regards it as a mere result of the custom common among the lowest classes of the Polonese, of letting the hair grow to an immense length,*" of never combing, or in any other way cleaning it, and of constantly covering the head with a thick woollen bonnet or leathern cap. ...Admitting Dr. Kerckhoffs' explanation of this disease to be correct, it is somewhat singular, that the same explanation has never hitherto been given by the most intelligent and most celebrated Polish or even German physicians.... Hence Sinapius (Jakub Hořický <Jacobus Sinapius> (1575 – 1622), was a Bohemian pharmacist and personal doctor of Emperor Rudolf II. and numerous other writers, deny uncleanliness to be the only, or even the ordinary cause. P.R Vicat recommends the use of the scissors whenever the hairs *bleed* (1775).

It is far better, with Dr. Kerckhoffs, to use them beforehand...". Though the disease has been usually confined to *the hair of the scalp, it has occasionally appeared in other quarters, as in the beard, the armpits, and even the pudendum* : authorities for which are quoted in the volume of Nosology. From the great afflux of fluids, and even of blood, to the head, during this disease, it

is often accompanied with hemicrania, or some other cephalalgic affection...".

The rare condition of Plica Polonica is still mentioned in the medical literature. Although many physicians and authors had described it with some possible etiological considerations and probable treatments, it was a forgotten French-Dutch military physician who left us with the most comprehensive account of the disease: Joseph Romain Louis Kerckhoffs.

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