

LETTER TO THE EDITOR

ANALOGIES IN MEDICINE: SAXOPHONE PENIS

Belo Horizonte, February 4, 2013

Dear Sir

The history of the saxophone can be traced back over 150 years. Although this seems like a long time, the saxophone is one of the newer instruments in the musical spectrum. It was invented by and named for Antoine-Joseph (Adolphe) Sax. He was an expert instrument maker and talented musician. The saxophone was patented on March 20, 1846. It has since become a necessity in every band due to its tonal beauty and versatility.

Sax grew up in the trade of instrument making. His father was an expert in instrument making. By the age of six, Sax had already become an expert in it as well. Sax, being the musician he was, became aware of the tonal disparity between strings and winds: moreover, that between brasses and woodwinds. The strings were being overpowered by the winds and the woodwinds were being overblown by the brasses. Sax needed an instrument that would balance the three sections. His answer to the problem was a horn with the body of a brass instrument and the mouthpiece of a woodwind instrument. When he combined these two elements, the saxophone was born.

In 1842, Sax moved to Paris to introduce his new instrument to the rest of the world. Soon to follow was the creation of an entire saxophone family: fourteen different saxophones in all. Each differed by size and pitch.

The saxophone finally became known as an integral part of all bands in 1845. This is the year of the famous "battle of the bands". The French Army band was still using "traditional" instrumentation. Sax saw this as an opportunity to show the world how the saxophone could improve the tonal quality in all bands. He suggested a contest between an army band composed of the original orchestral instrumentation against a band with an instrumentation that included saxophones. Sax's band of twenty-eight men, compared to the French Army band of thirty-five, overwhelmed the crowd. That day, the saxophone was officially introduced into the French Army Band and soon to all other bands.

Today, many people enjoy the wonderful music produced by the saxophone. The beautiful sound of a sax quintet or a blaring jazz soloist can be heard all around the world. The saxophone has become a part of almost every style of music. It is being played everywhere from night clubs to football fields. The saxophone is truly one of the great musical instruments in our existence². In 1992, the former President Bill Clinton played his saxophone on Arsenio Hall Show.

Saxophone penis deformity is one manifestation of genital lymphedema or "elephantiasis". It may be a sequel to late stage of sexually transmitted infections (STIs), most commonly lymphogranuloma venereum. In endemic areas it may result from lymphatic filariasis.

Lymphogranuloma venereum (LGV) (Nicolas-Durand-Favre disease) is caused by *Chlamydia trachomatis* types L1, L2 and L3. The human is the only natural host. Most infections are sexually transmitted and the disease is common in the tropical countries. LGV affects the lymphatics, starting as a small primary lesion, followed by development



Fig. 1 - Saxophone penis. Diagnostic picture tests in sexually transmitted diseases – Taylor PK, 1995. Bristol Royal Infirmary, Bristol, England.

of suppurative regional lymphadenitis. The LGV genital syndromes occur in both sexes. Most characteristic is genital lymphedema, which may develop a few weeks or many years after infection and gives rise to elephantiasis. The association of elephantiasis of the vulva with scarring and fistulae of the buttocks and thighs is known as esthiomene. Occasionally, small abscesses develop along the course of the superficial lymphatics draining the primary lesion and break down to form ulcers. Urethral lesions may cause strictures and fistulae, and

lymphoedema may produce a "saxophone penis" (Fig.1). Other causes of saxophone penis are donovanosis, syphilis and chronic lymphatic filariasis^{1,4}. Another cause is congenital lymphedema. This uncommon disorder may result in disfiguring edema of the male genitalia.

Primary congenital lymphedema is the rarest form of primary lymphedema. Primary penile lymphedema occurs infrequently and is seen in conjunction with a similar process in the scrotum.

JAIN, VK *et al.*³ report a case of scrotal and penile lymphoedema in a 12-year-old child since five years. He did not have any history of trauma, infection, or any other cause of secondary lymphedema. Clinically, he did not have lymphadenopathy. General and systemic examinations were essentially normal. The lower limbs were normal with no signs of lymphoedema. Genital examination revealed a cold, non-tender, large-curved penis measuring five inches in length and five inches in circumference, looking like a "saxophone". Treatment was surgical with satisfactory cosmetic results³. **Saxophone penis deformity** (Port. Pênis em saxofone. Esp. Pene en saxofón) results from progressive lymphangitis giving rise to indurated edema and sclerosis of underlying subcutaneous tissues. It is hypothesized that there is differential contraction of connective tissue on the dorsal and ventral aspect of the penis determined by differential blood supply, leading to bending of the penis dorsally.

José de Souza ANDRADE-FILHO
Faculdade de Ciências Médicas de Minas Gerais
Belo Horizonte, Minas Gerais, Brasil
E-mail: labjsouzandrade@terra.com.br

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