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The extraordinary case of Henri de Toulouse-Lautrec. Dwarfism in combination with bone fragility

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ABSTRACT

Henri de Toulouse-Lautrec, a descendant of an aristocratic family from France, lived many years before the application of the achievements of genetics. Suffering from an illness unknown at the time, he was forced from an early age to isolate him self and unfold his unparalleled talent freely, without restrictions. His association with people living on the margins of society, along with his choice to immortalize everyday scenes from their lives on the canvas, compose the enigmatic puzzle of his character. At the same time, his habits, sexual preferences, alcohol addiction, and his premature death from syphilis are the reasons to start an in-depth investigation. The purpose of this study is to elucidate the deeper causes that guided the outlets of his art, at the same time that his short stature, combined with the fragility of his bones, trigger a variety of hypotheses surrounding an underlying inherited disease. Osteogenesis imperfecta justifies certain symptoms. Osteopetrosis involves clinical signs that were absent in Lautrec's case. Pycnodysostosis, however, seems to fulfill the requirements to be unequivocally accused. Our main pursuit, however, is not so much the revelation of the disease from which the artist suffered, as the understanding of his art and the delight given by the correct reading of his works.

KEYWORDS: Toulouse-Lautrec; dwarfism; bone fragility; osteogenesis imperfecta; osteopetrosis; pycnodysostosis

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Introduction

Inherited diseases follow a specific algorithm. After the first observations of Gregor Johann Mendel [1] and the long-term studies that followed [2-4], genetics was able to decipher the laws governing the inheritance of somatic characteristics from generation to generation. The research findings have come so far that we can now hope for a brighter future. The mapping of the genetic material that each cell carries in its nucleus nowadays offers incredible possibilities to researchers for the prevention or effective treatment of an inherited disease [5-7]. The prejudices and stereotypes that pushed our fellow human beings with a deformed and short stature violently on the sidelines are now outdated.

Childhood and Adolescence

Henri Marie Raymond de Toulouse-Lautrec-Monfa was born on November 24, 1864 in Albi, Midi-Pyrénées, South France [8]. His parents were first cousins, a fact that is justified in aristocratic families even today. The financial comfort of the paternal family gave little Henri the opportunity to live happily and carefree his first childhood years. However, after the divorce of his parents, when he was 8 years old, he moved to Paris to live next to his mother. It was the moment when his early talent in painting and sketching became apparent. René Princeteau, a friend of his father, gave the first lessons to the charismatic Henri.

In 1875, at the age of 11, Henri moved back to Albi's hometown because his mother had a health problem and had to visit the Amélie-les-Bains hot springs. His relationship with her was harmonious. He loved and admired her. He considered her a "personalized virtue" and often called her "Juno Lucina". During this period, his mother took the opportunity to seek medical advice for his short stature and developmental delay (Figure 1). Her effort proved futile. At the same time, his father remained inactive, feeding only feelings of shame for his son's strange body type.

At the age of 13, Lautrec had the unpleasant experience of a fracture in his right femur. The following year, he suffered a fracture in his left thigh. These fractures have never been adequately healed. Many researchers attributed the imbalance of his appearance (normal adult trunk and childish short limbs) to this complication [9].

The adolescent years of the small Henri are characterized by isolation and lack of sociability (Figure 2). He did not participate in games with other kids of his age, because he was afraid of causing a new fracture. He was looking for ways to escape reality, in front of the easel, with the paintbrush in his hand. He had to adopt adult behaviors from an early age, depriving himself of the carelessness and innocence that characterize a normal child.

Creative Sensibilities

Lautrec's talent manifested itself early on. His career, however, was favourably influenced by certain coincidences. His advancement in sketching and painting prompted Princeteau to persuade his parents to let him return to Paris. With his own recommendations, he could study next to the famous for his portraits, Léon Bonnat. Under pressure from the Princeteau, the 18-year-old Lautrec officially began his career in Paris in 1882.

The next stages of his creative path developed into a deterministic sequence, as his undisputed talent, and the influence that his aristocratic ancestry could exert at any time, led his steps to Montmartre. The hangout of bohemian life, the meeting point of all kinds of artists, philosophers and writers, was the only place that would be able to accommodate the dreams of the restless student. In Montmartre Lautrec discovered himself. There he showed his creative talent [10].

In the meantime, he moved to Fernand Cormon's studio, where he studied for the next five years. There he met people who would embrace him with their friendship and painters who would influence his style, such as Émile Bernard and Vincent van Gogh. He began to wander the streets looking for topics that would provide solutions to his creative sensibilities. It was then that he met the prostitute Marie-Charlet who agreed to paint her portrait.

In 1885, he took a step forward: he began exhibiting his work at Mirliton, a cabaret that was run

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Figure 1. *Lautrec's father felt ashamed of his son's strange body type.*

Figure 2. *He did not participate in games with other kids of his age, because he was afraid of causing fractures.*

by Aristide Bruant. Two years later, he dared to exhibit his works in Toulouse under the pseudonym Tréclau (anagram of the surname Lautrec). His acquaintance with Suzanne Valadon played a decisive role in his life. He satisfied her coquetry by creating numerous portraits of her (Figure 3). Their relationship never went on until marriage. Valadon attempted suicide in 1888.

After 1888, his career took off. The encouraging reviews for him, the successful exhibition in Brussels, the purchase of his painting by Theo (Vincent van Gogh's brother) for 150 French francs, along with the rise in his self-confidence, played a decisive role. However, what determined his artistic career was his association with prostitutes and his frequent visits to whorehouses. The girls on the margins seemed to have a special charm for this pariah of the establishment who had renounced his arrogant origins; a waste of the aristocracy who was looking for ways to confirm himself. His association with girls stimulated his creative oestrus and gave new impetus to his art. There are about 150 Lautrec paintings and sketches inspired by the prostitutes who accompanied him (Figure 4).

Dwarfism in combination with bone fragility

Science, trying to elucidate the underlying disease from which Lautrec suffered, to clarify why his bones were constantly breaking and his height remained low, relied on biographical data and surviving photographs. It is not an easy task! The knowledge of experts, the perceptiveness of the researcher and the constant scrutiny of the literature need to be mobilized.

Osteogenesis imperfecta is the most common genetic cause of skeletal fragility in a child. It is due to a disease of the connective tissue [11]. The range in which it moves is wide, ranging from the lethal form in the perinatal period to the mild form, the diagnosis of which is often a matter of disagreement. One

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Figure 3. *His acquaintance with Suzanne Valadon, of whom he painted numerous portraits, played a decisive role in Lautrec's life.*

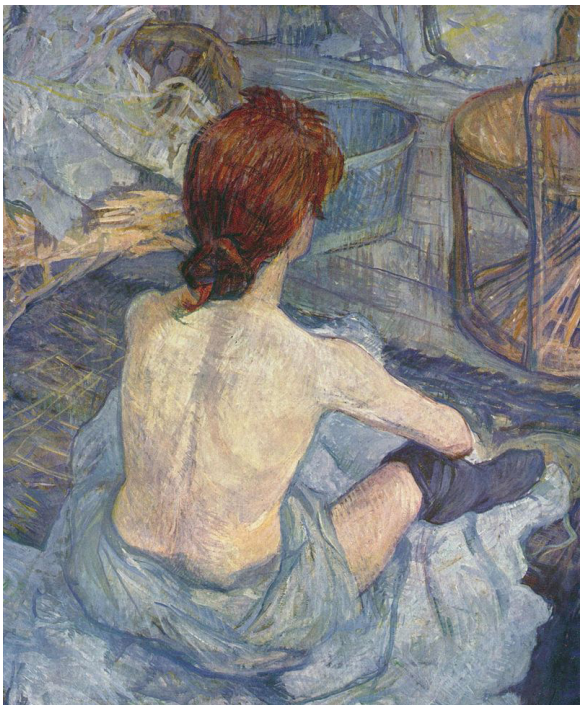

Figure 4. *His association with the girls of the cabaret sparked his creative oestrus and gave new impetus to his art.*

could classify the case of Lautrec in this latter form. However, unspoken doubts and unanswered questions would remain forever, as the data we have on Lautrec's somatic deficit are incomplete.

The disease is characterized by the trinity: fragile bones, blue sclerae of the eyes and early deafness. Limb deformities and short stature can be attributed to multiple bone fractures and their healing in a defective position [12-18]. Considering that, Lautrec did not have a blue colour in the sclerae of his eyes, nor did he have a deformity in the spine, the possibility that he had inherited the disease is considered zero. At the same time, we know that osteogenesis imperfecta is inherited by a dominant (and not recessive) gene. Therefore, at least one of his parents had to suffer from the disease, which certainly did not happen.

Osteopetrosis occurs in two main forms: the severe form, which is inherited by a recessive gene, and the mild form, which is inherited by a dominant gene. For the severe form, we know that it manifests itself from infancy with macrocephaly, hepatosplenomegaly, deafness, blindness and severe anaemia. Pathological fractures are due to the compact configuration of the bone architecture, which makes the lives of patients impossible. Children suffering from this form rarely survive beyond the 2nd decade. In contrast, the predominant form is milder and usually occurs during childhood or adolescence, with fractures and mild anaemia [19-21]. It is clear that

Figure 5. *Pycnodysostosis is very close to successfully describing Lautrec's clinical manifestations* ***a.*** *His height did not exceed 150 cm* ***b.*** *Self-portrait with obvious characteristics of pycnodysostosis.*

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Figure 6. *When the Moulin Rouge cabaret opened, Lautrec agreed to create a series of posters.*

the case of Henri de Toulouse-Lautrec does not agree with either the severe recessive form or the milder dominant form.

Nowadays, the expert opinions converge on pycnodysostosis, as the most likely diagnosis that approaches to successfully describe the clinical manifestations of Lautrec. It is a bone dysplasia inherited with a pathological recessive gene [19, 22]. Appears in early childhood with short limbs, characteristic face, and open anterior fontanelle, large skull, with protrusion of the frontal and occipital bone and abnormalities in dentition. The arms and legs are short and wide. The nails are hypoplastic. The sclerae of the eyes are sometimes blue. Minor injuries usually cause fractures. Patients do not exceed a height of 130-150 cm (Figure 5). In the international literature, one can now find pycnodysostosis with the alternative name Toulouse-Lautrec Syndrome.

Evaluation of the man and review of his work

Lautrec's choice to use vivid colours, the preference to depict scenes of everyday life indoors or outdoors, as well as the emphasis on representing light with personal touches to capture the immediate impression, are characterizing his works. Unsuspecting, he followed in the footsteps of impressionism pioneers such as Édouard Manet και Edgar Degas. He himself hated models. He disparagingly called them "stuffed dolls". He once confessed: "I have found girls of my own size. Nowhere else have I felt so good as if I were at home" [8-10].

Figure 7. *His walking stick was hollow to hide the alcohol there.*

When the Moulin Rouge cabaret opened in 1889, he agreed to make a series of posters (Figure 6). Some of his colleagues rushed to ridicule him, but he remained completely indifferent. The cabaret had a seat especially for him, while he used to display his works. These posters by Lautrec make up a significant part of his work. His unstable soul forced him to turn to alcohol. He started with large quantities of wine and beer but soon resorted to absinthe, which led him to hallucinations. It is said that the walking stick he was holding was hollow to hide the alcohol there (Figure 7). It was not long before he became infected with syphilis.

In February 1899, he collapsed due to chronic alcoholism and the complications of syphilis. It soon became apparent that his mental and physical health would not regain their lustre. He died on September 9, 1901, at the age of 36. After his death, his mother took care to save and promote his work. A museum has been set up in Albi, his birthplace, where most of his works are housed. This is an admirable creation: 737-canvased paintings, 275 watercolors,

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363 prints and posters, 5.084 drawings. However, we know that there are other works (stained-glass works and ceramics) that have been lost [23].

Conclusion

The peculiarity of Toulouse-Lautrec's case lies in the fact that he was able to transform his physical problem into an artistic creation. For us, his strange case simply mobilized and activated our thinking.

Conflict of interest

The authors declared no conflicts of interest.

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