

Cupolas, frescoes, sculpture, façades, churches and being saturated with artistic beauty may trigger the disturbing neurological condition known as Stendhal's Syndrome or the Traveler's Syndrome.

## By: Ximena Serrano Gil Photos: Juan Ramírez, Leonardo Parra

f, when you are in front of a work of art, a marvel of nature or an architectural monument, or are listening to a piece of music, you feel disoriented or your heart races and you feel dizzy or faint or tremble or are seized by depression, excitation or hallucinations, you may be suffering from a very rare and overwhelming neuropsychiatric condition known as Stendhal's Syndrome or the Aesthetic or Traveler's Syndrome, which may cause problems for your health.

This is a novel subject in the history of medicine, since the term was only coined in 1989, when the Italian psychiatrist Graziella Magherini reported the syndrome, based on 106 cases of foreign patients with the same clinical symptoms in a hospital in Florence, Italy. Dr. Magherini named it in honor of the 19th century romantic writer, Henry-Marie Beyle, known by his pen name, Stendhal, the first to describe this experience, which he felt himself when he visited the Basilica di Santa Croce in the same city.

In Colombia it is such a novel subject that there are no records of these curious cases: The syndrome is not codified by public health agencies and much less is there a study of the frequency of this disease on a global level. Thus, the *Neuroscience (NEUROS) Research Group* at the School of Medicine and Health Sciences of the Universidad del Rosario has been the first in Colombia to publish a study of it and make it more widely known.

"Our aim is to show and analyze the link between beauty, art and history, and the effects on the brain revolving around it," explains the neurologist Leonardo Palacios Sánchez, one of the founders of the NEUROS group, leader of the line of research called *Humanities and Neuroscience* and co-author of the article, *The Stendhal Syndrome: A clinical and historical review*.

# The brain as a tool of communication

"Although you may not believe it, since this illness is not very frequent and it is unknown to many doctors, its diagnosis and, of course, its treatment, may be mistaken," Palacios notes. Due to its peculiar nature, we ourselves may think we have had this syndrome at some time without realizing it, but the co-author of the article, Juan Sebastián Botero Meneses, who is a doctor and researcher, explains that it is one thing to be moved, positively or negatively, by a great work of art, but

# Historical antecedents related to the Traveler's Syndrome

On January 22nd 1817, Stendhal visited the Basilica di Santa Croce, which is covered with marvelous frescoes by Giotto di Bondone and magnificent paintings by Baldassare Franceschini, who was known as "Il Volterrano," from his birthplace in Volterra. In a church which also houses the tombs of Niccolò Machiavelli, Galileo Galilei and Michelangelo Buonarroti, Stendhal had an experience which changed his life. When a monk opened the doors, the French poet knelt in prayer and bowed down his head. Of that moment, he wrote: "I had reached that point of emotion where the heavenly sensations of the fine arts meet passionate feeling. As I emerged from Santa Croce, I had palpitations (what they call an attack of the nerves in Berlin); the life went out of me, and I walked in fear of falling." A similar phenomenon occurred when people visited other cities, which gave rise to the term, "the Paris Syndrome," coined in 1986 by the Japanese psychiatrist Hiroaki Ota, who noted that a number of persons, after visiting Paris, suffered from dizziness, tachycardia, heart palpitations, breathing difficulties and psychiatric symptoms, including both visual and aural hallucinations.

In 1989, after 20 year of observing the syndrome, Dr. Magherini published the findings of her study of the 106 persons mentioned above. After several visits to the museums and galleries of Florence, most of the patients suffered from dizziness, palpitations, hallucinations and felt disoriented, depersonalized and profoundly exhausted. Dr. Bar-EI and his work team have described the condition known as the "Jerusalem Syndrome," whose characteristics are very similar to those of the Stendhal Syndrome and affect the ever larger number of tourists who visit the Holy Land.  $\rightarrow$ 

Dr. Juan Sebastián Botero Meneses, the lead researcher of the group, remarks that a study of the Stendhal or Aesthetic Syndrome highlights the importance of the liberal arts in the teaching of medicine and is in line with the philosophy of the university, which seeks to train doctors with a broad knowledge which is not limited to analyzing signs and symptoms.

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In the opinion of Leonardo Palacios, any person has the cognitive capacity to admire and be moved by art, since beauty is relative to each individual. One may have cognitive, emotional or physical sensations, like laughing, crying or shouting, which are part of the context of a clinical condition.

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quite another to go beyond the limit of emotions and show physiological responses to an aesthetic stimulus.

The Stendhal syndrome is a complaint characterized by different symptoms, both physical and mental, in the presence of a work of art. To understand it, Professor Botero points out that those physical symptoms are owed to an involuntary alteration of part of the autonomous nervous system, which regulates the basic functions of the body, like arterial pressure, breathing or a person's heart rate or pulse. This alteration is known as dysautonomia and it may cause fainting fits, heart attacks, asphyxia, convulsions, cardiac arrhythmia, strokes or depression,

among other kinds of distress.

"The autonomous nervous system has two divisions: The sympathetic nervous system and the parasympathetic nervous system. The balance between the two is what gives us the evolutionary responses of fleeing from danger and reestablishing bodily energy. In a situation of risk, the sympathetic system increases a person's heart rate with the aim of pumping more blood into the muscles so that the person can run and it also dilates the pupils, but when this happens due to a stimulus like a work of art, a monument or a piece of music,



the person feels a pain in the chest which spreads to the jaw and from there to the arms, and the person falls down, which is known as the Stendhal or Aesthetic Syndrome," he explains.

Also, Botero stresses, while a neurological syndrome is also a neuropsychiatric one, with a very important component of behavior, it thus has to be assessed in terms of its context, as you clinically diagnose any condition of mental health, like, for example, depression or affective bipolar disorder, since being depressed is not the same as suffering from a clinical depression.

## A person's level of education is a factor of risk

"A person of any cultural level, who is sensitive to art and aesthetics, may have the syndrome. Nevertheless, there are some risk factors which indicate a predisposition to its development and they have to do with the person's educational level, marital status, age, the end of a journey and religious training," notes Palacios Sánchez, who is also the founder of the "Chair of Happiness" (*Cátedra de la Felicidad*) at the Universidad del Rosario.

To illustrate some of these ideas, Professor Palacios explains that the person's educational level draws him close to art and awakens a stronger sensitivity. If the person has grown up in a very religious home, their experience will be more intense than that of someone who is not religious, because the history of religion, whatever the religion is, is closely linked to art and most of the great masterpieces of the Middle Ages or the Renaissance have a religious origin: They were made to cover the walls of cathedrals, mosques and synagogues.

Another factor of predisposition is when the person's visit is coming to an end and he or she feels sad and melancholy, which triggers very anguishing symptoms, with responses which are not so physiological but pathological.

## The treatment for a surfeit of beauty

Speaking of the management and treatment of the Stendhal Syndrome, Botero Meneses stresses that it is a polymorphic disorder from the clinical point of view, that is, it expresses itself in different ways, therefore, it must be approached in an individual manner so that it is not mistaken for other pathologies, like ecstatic epilepsy, a condition characterized by the emergence of a crisis which changes the patients' mood, with sudden switches between pleasure and discomfort.

As for the question of whether remembering the experience causes a new appearance of symptoms, the head of the research team, Leonardo Palacios, says that it may eventually activate the syndrome again and there are two options of treatment to deal with that: A therapy of desensitization, which consists of returning to the same site but in the company of other persons, which may be expensive if the moment of exaltation occurred during the patient's visit to Italy and he or she happens to live in Colombia. The other is a pharmacological treatment or psychotherapy.

Thus, the difficulty for the people who suffer from this syndrome is that they will experience these symptoms many times in their lives while they look at works of art in other places. Doctors should learn about this disorder and its reactions, so that they can appropriately treat and report on these cases: They should likewise take into account that there is a relation between visits to tourist attractions and the cities which are full of splendid works of art – like Florence, Paris, Athens, Tokyo, Rome or Jerusalem – which boast of famous museums, galleries, heritage buildings and churches.

Finally, and continuing with the study of neuroscience and culture, Doctor Palacios explains that "We, in the *Neuroscience (NEUROS) Research Group*, would like to form a study group of students and non-academics who look at works of art, and, placing electrodes on their heads and monitoring their heart rates, record what is happening in the brain." That way, they could study the link between emotion and knowledge which is found in the deepest recesses of the mind.