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HISTORIA Y HUMANIDADES EN DERMATOLOGÍA

[Translated article] Canities Subita: Two Cases Described in *General and Natural History of the Indies* by Fernández de Oviedo (1478-1557)

Canicie súbita en la *Historia General y Natural de Indias* de Fernández de Oviedo (1478-1557)

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Canities subita, also called Marie Antoinette syndrome in women, Thomas More syndrome in men, and “nocturnal aging phenomenon” in both sexes,¹ is a condition in which sudden whitening of the hair occurs in a short period of time, usually as a result of psychic trauma.

There have been a considerable number of descriptions of this phenomenon throughout history. Perhaps the first is in the Talmud,² in a young man of 17 years, who suffered canities subita after being appointed head of the main Israeli Talmudic academy. In the modern era, the cases of Tomas More (1478-1535), who noticed sudden whitening of his hair the night before he was beheaded at Tower Hill on July 6, 1535^{1,3,4}, and of Queen Marie Antoinette of Austria (1755-1793), wife of Louis XVI, king of France, guillotined on October 16, 1793⁵ in the Place de la Révolution (now Place de la Concorde), are only the most striking cases included in a large retrospective study published in

2013.⁶ In this review by Nahm et al., only 44 of the 196 cases described, were certified by physicians who had seen the patient both before and after the appearance of canities subita; in 82 cases, the physician certified that he had already seen the patient with established graying, but not before, and the remaining 70 cases corresponded to unclear descriptions. In 64% of cases, the process was triggered by emotional stress. The possible causes of this rare situation have been widely discussed, and the conclusion seems to be that the most likely cause is a diffuse alopecia areata affecting only pigmented hair while sparing white hairs.^{1,7}

General and Natural History of the Indies, Islands, and Mainland of the Ocean Sea by Captain Gonzalo Fernández de Oviedo y Valdés (1478-1557) (Fig. 1), first chronicler of the Americas, was published in Seville, with imperial privilege, in 1535.⁸ It has come down to us thanks to its publication, in 1851, by the Academia de la Historia under the direction of and with comments by D. José Amador de los Ríos.⁹ In this work, the author describes 2 cases of canities subita caused by psychic traumas that we believe have not yet been mentioned in the dermatological literature.

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Figure 1 Gonzalo Fernández de Oviedo. Academia Colombiana de la Historia.

Don Gonzalo Fernández de Oviedo, the son of Asturian parents, was born in Madrid in 1478. When still very young, he entered the service of the second Duke of Villahermosa, nephew of the Catholic King, and was appointed valet in the service of Prince Juan, son of the Catholic monarchs, in 1493.¹⁰ On the death of the prince in 1497, he went to Italy, as he himself recounts: "My discontent led me to leave Spain and travel the world, having gone through many travails and hardships, as a young man, sometimes as a soldier and other times wandering from some places and kingdoms to other regions."¹¹ In 1502 he returned to Madrid, where he met his future wife, Margarita de Vergara, "one of the most beautiful women of her time in the kingdom of Toledo," and married her in the spring of 1507.¹² During this time he was a public notary and Secretary of the Holy Inquisition. In 1507 he married Catalina Rivafacha. Shortly thereafter, in 1512, he became secretary to the Grand Captain (1453-1515), an office he held until he sailed for the Indies in 1513 with the expedition of Pedro Arias Dávila (Pedrarias), governor of Castilla del Oro de Tierra Firme, where he would be Pedrarias' lieutenant and Governor of Cartagena. He became Governor of Darien in 1520 and, in 1532, Perpetual Councillor and Warden of the fortress of Santo Domingo, where he would die in 1557 at the age of 79.

Chapter XXXIX of Book VI of the *General and Natural History* is entitled "Of two remarkable things about Margarita de Vergara, the wife of this historian: the first is that she never spat; the other is that she went gray one night, being a very beautiful blonde woman of 26 or 27 years." In this chapter, he describes his wife and her good health ("never did I or any person of my household see her spit") and goes on to say: "Let us return to my misfortune and hers, and to her end, and to the sudden white hairs that came upon her." Then, as if justifying the fact, he adds "this has also befallen other people." Before recounting in detail his wife's sudden graying, he narrates the case of Don Diego Osorio: "I remember that Don Diego Osorio was imprisoned in Seville, in the

Torre del Oro. They said, or he believed, that on another day he was to be beheaded by order of the Catholic Queen, Doña Isabel, and although he was young and without any white hair, in one night his hair and beard turned as white as ermine. This is known to all, and I saw it, because before he was imprisoned I met him and found him at court as a boy page, I saw him after his release with white hair, for which reason he put on a wig and shaved his beard often: a very short time ago, he died while serving as chief steward to the Empress, our lady, of glorious memory, and was much esteemed as a good and wise gentleman."

He goes on to give more details of his wife's case: "After my Margarita and I were married, she became pregnant and at nine months she was delivered of a son; such was the birth that it lasted three days with their nights, and they had to pull the baby out and he was already dead; they seized him where they could, as only the upper part of the child's head was showing, and they smashed his head and emptied his brains so that their fingers could grasp him, and thus he came out putrefied and foul smelling, and the mother was already almost dead. The fact is that she lived, although she lay six or seven months prostrated in bed, suffering and in the throes of death. But in that laborious night, at the end of her difficult birth, her hair became so gray that the hair that had looked like fine gold turned the color of fine silver."

The sudden whitening of hair has been a subject of debate throughout the ages. Many, such as Hebra and Kaposi, consider it a myth, while others, like McCarthy, believe it to be real.^{13,14} In the most recent literature it is considered a form of diffuse alopecia areata affecting only pigmented hair, while sparing white hairs.^{1,7,15}

We highlight 3 of the possible causes that have been proposed to explain the phenomenon:

- The first might be the lack of cosmetic care. Temporary dyes, used before the introduction of organic dyes, did not penetrate the hair shaft and were easily removed.¹⁶ Imprisonment, with the consequent lack of care, could explain some cases, such as that of Marie Antoinette.^{17,18}
- Another possible explanation is the existence of a neuroendocrine mechanism similar to the one that occurs in some animals, such as the ermine, whose brown coat turns white with the arrival of winter.¹⁹
- The third possibility, and the most modern explanation, is diffuse alopecia areata or alopecia areata incognita. In this case, canities subita would be a consequence of alopecia areata affecting only black hair²⁰ as a result of the probable cytotoxic effect on a melanocyte antigen.⁷ This situation was already described by Sabouraud²¹ as a possible clinical presentation of hair loss: "When alopecia areata occurs in graying hair, it is quite remarkable to observe that the bald patch, already perfectly defined, has lost only its black hairs, while its white hairs are at least partially preserved" ("Lorsqu'une pelade yervient au milieu d'une chevelure grisonnante, il est très remarquable de voir la plaque déjà parfaitement dessinée n'avoir perdu que ses seuls cheveux noirs, alors que ses cheveux blancs sont au moins partiellement conservés"). For this to occur, of course, there needs to have been previously graying hair, a possibility we can rule out in the case of Margarita de Vergara, the wife of Captain Fernández de Oviedo, who was 27 years old and had blond

hair. We could say the same of Don Diego Osorio, who, as Fernández de Oviedo indicates, “was young and without any white hair”” In any case, to defend diffuse alopecia areata as the sole cause of canities subita, we would have to assess the density of the hair before and after graying,²² as the selective loss of pigmented hair would cause a more or less significant decrease in hair density, depending on the amount of gray present to begin with.

Of course, many cases referred to in the literature can be questioned, since sudden whitening of the hair has been used as a literary artifice to highlight the importance and severity of the character’s psychological stress.⁶ In the 2 cases described by Fernández de Oviedo, we only have the observe’s description to tell us what the hair was like before and after the triggering trauma. We know of no comments by other authors on the cases described in *General and Natural History of the Indies*.

Conflicts of Interest

The author declares that he has no conflicts of interest.

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