

Short Review

Snow white: an allergic girl?

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As I considered the exciting life of Little Snow-White, I started to think that the Grimm Brothers placed in that novel many hints that grouped the current knowledge of some features related to symptoms shown by allergic people.

First consideration

Does the lifestyle of Little Snow-White support the hygiene hypothesis theory [1]?

She was a princess and probably she never had played with mud [2], climbed trees [3], or slept with cows, pigs, or hens [4,5]. The novel reports that her mother, the queen, ... *had a little daughter, who was as white as snow, and as red as blood, and her hair was as black as ebony, and she was therefore called little Snow White.*(*)

Second consideration

Was Little Snow-White an asthmatic girl?

Her stepmother hated Little Snow-White and made several attempts to kill her. In the first one: *she disguised herself as an old peddler woman, ... she went to the house of the seven dwarfs.Snow-White peered out the window and said, "Good day, dear woman, what do you have for sale?" she answered. "Bodice laces in all colors..... let me lace you up properly." The unsuspecting Snow-White stood before her and let her do up the new lace, but the old woman pulled so quickly and so hard that Snow-White could not breathe.Not long afterward, in the evening time, the seven dwarfs came home. How terrified they were when they saw their dear Snow-White lying on the ground, not moving at all, as though she were dead. They lifted her, and, seeing that she was too tightly laced, they cut the lace in two. Then she began to breathe a little, and little by little, she came back to life.*

What is described is a reversible episode of acute respiratory compromise, including acute chest wall restriction or acute status asthmaticus.

Third consideration

Did Little Snow-White suffer from contact allergy?

The second attempt: *....She made a poisoned comb. ... knocked on the door, and called out, "Good wares, for sale!" said the old woman, pulling out the poisoned comb and holding*

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it up.After they had agreed on the purchase, the old woman said, "Now let me comb your hair properly." She had barely stuck the comb into Snow-White's hair when the poison took effect, and the girl fell unconscious. the seven dwarfs came home. When they saw Snow-White lying on the ground as if she were dead, they immediately suspected her stepmother. They examined her and found the poisoned comb. They had scarcely pulled it out when Snow-White came to herself again....

Fourth consideration

Did Little Snow-White suffer from Oral Allergy Syndrome (OAS)?

The third and most known attempt is wonderfully reported in the Walt Disney movie, the gift of a poisoned apple: *....she made a poisoned apple."Are you afraid of poison?" "Look, I'll cut the apple in two. You eat the red half, and I shall eat the white half." Now the apple had been so artfully made that only the red half was poisoned. Snow-White longed for the beautiful apple, and when she saw that the peasant woman was eating part of it she could no longer resist, and she stuck her hand out and took the poisoned half. She barely had a bite in her mouth when she fell to the ground dead.*

The novel then reported that the seven dwarfs: *... laid her on a bier, and all seven sat next to her and mourned for her and cried for three days.Now it happened that a prince entered the dwarfs' house,the good dwarfs felt pity for him and gave him the coffin. The prince had his servants carry it away on*



their shoulders. But then it happened that one of them stumbled on some brush, and this dislodged from Snow-White's throat the piece of poisoned apple that she had bitten off. Not long afterward, she opened her eyes, lifted the lid from her coffin, sat up, and was alive again".

If we suppose that Snow-White suffered from OAS, the apple bite caused swelling of mucosa in the throat, thus not allowing her to breathe.

In this regard, we may remember Robin Williams, as Mrs. Doubtfire, which helped her wife's new boyfriend to spit out the offending mouthful through a typical Heimlich maneuver.

Conclusion

Putting together all the above considerations, I feel confident that the Grimm brothers grouped those facts accordingly, anticipating what the Nobel Prize Albert Szent-Györgyi (1893–1986) said:

"Discovery consists of looking at the same thing as everyone else and thinking something different".

(*) Text quoted from the 1857 version of the Grimm Brothers' Little Snow-White, translated by Prof. DL Ashliman (<https://sites.pitt.edu/~dash/type0709.html#snowwhite>).

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