

Hematohidrosis

Sir,

Cases of colored sweat (chromhidrosis) are very rare and are due to colored apocrine secretion. Pseudochromhidrosis refers to the condition in which initially colorless sweat becomes colored on the surface of the skin due to the action of chromogenic bacteria especially corynebacteria. Cases where colored sweat is produced in localized areas are extremely rare. Face is the commonest site and color produced may be black, violet, blue, brown, yellow or green. Red colored sweat is very rare and the pigment is a lipofuscin. Bloody sweating is called hematohidrosis and is exceptionally uncommon. True hematohidrosis may occur in bleeding disorders.^[1] We hereby report a case where bloody sweat discharged from the forehead episodically in a healthy young girl, who did not have any bleeding disorder.

A 12-year-old girl, resident of a village near Dharwad district of Karnataka, came to us on July 8, 2007, with the history of bleeding from the intact skin over the forehead for the last 2-years. The first episode started a few days after a horrifying incident, which she witnessed, in which a woman was beheaded by the villagers in her village. The bleeding occurred in episodes, once or twice a day, sometimes more frequently, especially when she is anxious. Sometimes, she did not get such episodes for two or three weeks. About 15-20 minutes before each episode, she gets a peculiar tingling sensation over the forehead and she becomes aware that in another few minutes she will experience the episode. Each episode started with frothy, watery secretion over the forehead soon followed by the bright red colored secretion. Each episode lasted for about 10-15 minutes and the patient remained perfectly alright during the post-episode period till the next episode. She also complained of similar episodes over her umbilical area. There was no history of bleeding from any other site. No history of ingestion of any anticoagulants, dyes or other drugs was obtained from her. She did not have any history of

major medical or surgical illness in the past. No family member had similar complaints. She had attained menarche one year back. Menstrual cycles were regular and normal. On physical examination, she was anxious. Her general physical examination and systemic examinations did not reveal any abnormality. The skin over the forehead was normal. There were no cuts, abrasions or telangiectasiae [Figure 1]. There was no local tenderness. Blood or red colored secretion could not be extruded on manipulation. We witnessed one episode during our clinical examination. On gross examination, the secretion was bright red in color, less viscous than blood and it was not frank blood [Figure 2]. We collected the bloody secretion in a syringe and smeared it onto a glass slide and examined under microscope. There were plenty of erythrocytes. The left out secretion collected in the syringe was examined after 1 hour and it did not clot. Her psychiatric evaluation revealed severe depression in her. We investigated her. Her routine hemogram, blood counts, platelet count, bleeding time (2



Figure 1: Normal skin over the forehead before the episode. There are no cuts, abrasions or telangiectasiae



Figure 2: Just at the beginning of the episode

minutes 00 seconds), clotting time (4 minutes 10 seconds), active partial thrombin time (27.4 seconds; normal range-24-32 seconds), prothrombin time, blood peripheral smear examination, liver function tests and renal function tests were all within normal limits. Urine and stool examination did not reveal erythrocytes or any abnormalities. Upper gastro-intestinal endoscopy and ultrasound of the abdomen did not reveal any abnormality. We treated her with tricyclic antidepressants. There was mild improvement in that, the frequency of the episodes got reduced and subsequent episodes were not so severe. The patient is still under follow up.

Hematohidrosis is a very rare condition in which a human being sweats blood. It may occur in an individual who is suffering from extreme levels of stress, for example, facing his or her own's death. Around the sweat glands, there are multiple blood vessels in a net-like form, which constrict under the pressure of great stress. Then as the anxiety passes, the blood vessels dilate to the point of rupture. The blood goes into the sweat glands. As the sweat glands produce a lot of sweat, they push the blood to the surface, -which come out as droplets of blood mixed with sweat.^[2,3] There is a case report in which a young girl who had psychological disturbance developed hematohidrosis, but unfortunately, the case report is not in English language.^[4] Our patient had severe psychological stress and whenever she was anxious, she was secreting bloody sweat. We could not find many case reports of hematohidrosis in the literature. Hence, we are reporting this case for the extreme rarity of the condition.

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