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Retreat to chromhidrosis: A painstaking review

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Abstract
The peculiar disorder dubbed chromhidrosis is characterized by the apocrine or eccrine glands concealing colored sweat. This phenomenon typically appears during puberty and may appear in a variety of colors, such as black, green, brown, and blue. Apocrine chromhidrosis, which impacts the anogenital and axillary regions, and eccrine chromhidrosis, which involves the ear canal and labia, are the two primary explanations of the condition's characteristic-colored stains on clothing. Botulinum toxin injections, oral drugs, and cosmetic treatments are available forms of treatment. For chromhidrosis to be successfully managed, it is essential to comprehend its underlying causes, symptoms, and treatments that exist.

Keywords: Chromhidrosis, colored sweat, apocrine glands, botuline toxin

Introduction
The Greek words "hue" (hued) and "hidros" (sweat) have been combined to form the term "chromhidrosis," which pertains to the multicolored transpiration. Sweat from apocrine or eccrine glands becoming multicolored is an unusual symptom of true chromhidrosis. Sweat develops multicolored after exiting from the sweat glands in pseudochromhidrosis, a much more frequent ailment. Sweat falling into touch with chemicals, colorings, or chromogenic microorganisms on the skin causes pseudochroridrosis. Other types of sweat include bromhidrosis (funky sweat) and hyperhidrosis (excessive perspiration). Black, brown, green, unheroic, blue, colorful perspiration is a symptom of chromhidrosis. James Yonge was the first to report this strange medical condition in 1709. They were further separated into three categories: pseudochromhidrosis, eccrine chromhidrosis, and apocrine chromhidrosis.
Everywhere apocrine glands are observed, such as the anogenital and axillary zones, eyelids, cognizance, crown, box, and areola, apocrine chromhidrosis occurs. Apocrine glands ordinarily store excess quantities of an odorless, unctuous fluid in the hair conduit, which eventually gets broken down by organisms to generate a pheromonal body odor after it enters the skin's face.
With the possible exceptions of the observance conduit, lips, prepuce, glans penis, clitoris, and labia minora, eccrine glands distribute across the skin with variables viscosities, permitting eccrine chromhidrosis to occur practically anywhere on the body. Lower than apocrine glands, eccrine glands are innervated by the sympathetic nervous system and release a diminished salty sweat that comprises mainly up of water and electrolytes. Despite their desultorily close spacing on the pads of the integers' epidermal crests, the furrows lacking pores. They provide a role in electrolyte excretion, skin hedge protection, and thermoregulation. The combination of tintless eccrine sweat against different composites, which eventually results in a multicolored sweat, promotes pseudochromhidrosis.

Symptoms
The hallmark of chromhidrosis is the development of rainbow perspiration. Sweating may only occur in particular spots or all over the body depending on the color. Each person may have an alternate shade's color and vibrancy. Before colored sweat develops, certain individuals report feeling heated or prickly, something that they ascribe to stress or physical exertion.
Sweat exhibiting chromhidrosis could become brown, green, blue, or unheroic. The symptoms of chromhidrosis, such as anxiety, despair, or emotional anguish, eventually appear. Weight loss, a reduction in energy or an increase in exhaustion, a general feelings of hopelessness, worthlessness, helplessness, remorse, or pessimism, a patient's nervous, depressed, or empty mental state, a lack of interest in once-pleasurable conditioning, Physical symptoms comprise headache that fail to go away, drowsiness problems with concentration, remembering, or making decisions, perversity, and investigations on suicide or death.

Causes

Depending on the type of chromhidrosis, there are many possible causes. Lipofuscin produces abrasion as part of the body's natural perspiration process in people with apocrine chromhidrosis. Disunion against the skin, hot showers or baths, and stimuli like fear, erotica, or pain constitute a few of the trusted causes may affect the apocrine glands and increase the possibility of this abrasion. The abrasion usually takes place in individuals with eccrine chromhidrosis as a result of swallowing reliable sources, colorings that interact to water, Certain details, such bisacodyl, a laxative, when covered with tartrazine, an unheroic color; heavy essence, like bobby; and particular meals colors or spice mixes. Pseudochromhidrosis is becoming increasingly common and happens when chemicals, colorings, or bacteria which create color come into connection with the skin. Infection, blood in the sweat, elevated bilirubin levels from the liver, and poisoning are among other health conditions that can cause humidity to change color. Addressing a croaker regarding colored perspiration is an outstanding idea. They are equipped recommend appropriate therapies and rule out more significant issues.

Etiology

Walter Shelley and Harry Hurley established in 1954 that the saturation of sweat in apocrine chromhidrosis can be triggered by lipofuscin granules that Lipofuscin is a brown, unheroic material that is not exclusive to apocrine glands and is usually discovered in the cytoplasm of cells in colorful organs. The total amount of lipofuscin present and/or the advanced-than-normal state of oxidation differentiates individuals with apocrine chromhidrosis against those with normal apocrine glands. Apocrine chromhidrosis therefore appears as a normal development. The color of lipofuscin can vary from unheroic, green, blue, black, or brown, and the less oxidation they is, the darker the color becomes. Apocrine chromhidrosis is characterized by an accumulation of multicolored perspiration, which is brought about by hot showers, cataracts, skin rubbing, and intellectual stimulants which involves pain, sexual stimulation, or fear. In certain circumstances, capsaicin has been found to be an effective treatment because substance P might be contributing to the origin.

The most prevalent exogenous cause of eccrine chromhidrosis is the coloring of clear sweat by means of the inhalation of water-soluble and colorings like tartrazine, heavy essences like bobby, coloring and seasoning ingredients in food items, and treatments like quinines, levodopa, tartrazine-carpeted bisacodyl, and rifampin. With or without pompholyx-like lesions, it is endogenously degenerative to hyperbilirubinemia, which exhibits as a greenish tint in palmoplantar distribution.

Pseudochromhidrosis is a foreign process that arises when the eccrine glands' monochrome sweat later acquires on color after getting exposed to outside variables such as medications that alter the microbial community on the face. The most prevalent triggers are chromogenic bacteria such Serratia marcescens, Bacillus species, and Corynebacterium species. Chemicals like dihydroxyacetone, colorings, maquillages, and fungi like Malassezia furfur have also been intertwined.

Opinion for Apocrine chromhidrosis

A clinical examination is usually utilized to diagnose apocrine chromhidrosis. The opinion might be verified using the following: Grain oxidation gland and localized distribution are potentially further investigations. The anogenital eccrine axillae areolae Sweat from the affected part may be represented as colored sweating that dries shortly. Analyzing a wood beacon might demonstrate unheroic luminosity. The lipofuscin fragments can be spotted under a microscope in recently expressed stained perspiration. The identification of papas-positive lipofuscin grains within the apocrine glands' apical cells has been demonstrated by a skin vivisection. hue A skin scraping and culture for estimating the total quantity of pseudochromhidrosis chromogenic bacteria tests assessing liver function and order function can be utilized for evaluating uraemia and hyperbilirubinemia.

For Eccrine chromhidrosis

Eccrine chromhidrosis is generally a clinical opinion, but the following may be used to confirm the opinion

- Dermoscopy to examine the character and position of the color
- Skin vivisection to distinguish from apocrine chromhidrosis
- Liver function and order function tests
- Skin scraping and culture to count chromogenic bacteria (the cause of pseudochromhidrosis)

Wood beacon skin examination to count apocrine chromhidrosis, which may show unheroic luminescence.

For Pseudochromhidrosis

In order to identify pseudochromosis, a complete medical history is gathered and the possibility of skin contact with chemicals, colorings, or colored clothing is evaluated. Look for relevant skin infection risk factors. The perspective could be bolstered up by,

- Fungal and bacterial societies revealing chromogenic bacteria and fungi
- Normal findings on skin vivisection
- Wood beacon examination- may be positive if infection is due to porphyrin- producing bacteria
- Normal results of liver and order function tests banning hostility and uraemia.

Treatment

Topical treatment: To lessen transpiration, topical treatment can be administered to the problematic area, similarly to how aluminum chloride hexahydrate accomplishes. Since it is not constantly effective, this prescription drug reduces the amount of of moisture produced by preventing the sweat glands. Furthermore, administering capsaicin cream externally at least two times a day can help manage chromhidrosis, but it may cause the sensation of burning.

Oral drug: Sweating can be lessened with a prescription drug which acts similarly to anticholinergics. Anticholinergics diminish the amount of sweat produced by hindering the no-way impulses that stimulated the sweat glands. Nevertheless, negative reactions from the medication could involve decreased vision and dry mouth. Another discreet strategy for addressing pseudohydrosis is discontinuing employing antimicrobial supplements or drugs so as to enable the skin's natural bacterial population to return to equilibrium.

Botulinium poison: By suppressing the no way impulses that stimulate the sweat glands, a botulinum spore injection may minimize the amount of pigmented sweat produced and treat chromhidrosis. It additionally has lasting consequences. The

last choice for treating chromhidrosis is surgery. The sweat glands that produced painted sweat will be eliminated after surgery. However, surgery involves a risk and can lead to difficulties like infection and scarring.

Case report of apocrine chromhidrosis

Case Report 01

A 26-year-old man with a history of depression and a reflux-related stomach complaint presented up with freckled areas on both of his malar cheeks that resembled like blank essay driblets. The driblets had been cropping up intermittently for two to three times, and they appeared significantly related to physical activity. In addition to robotic appearances, the case reported. He was frequently able to crush remove the concealment from his bilateral malar cheeks, nevertheless the appearance of the spots was not documented in the for instance. Though being asymptomatic, the driblets' unique and shifting appearance raised concerns for the cases. The existence of analogous driblets on his body was not included in the lawsuit. The case excluded the use of fluoxetine for depression and omeprazole for gastric reflux disorders, but also restricted the use of any new medications or topical skin treatments. Physical examination demonstrated that the patients had Fitzpatrick type 2 skin disease, which is distinguished by white skin burn and tanning, together with tiny bluish-black stashing globules which passed with little pressure on each cheek. Furthermore, the stashing task might be replicated with mild-to-moderate exertion (such as walking around the clinic). The axillary, areolar, or any other region on the case's body hadn't been utilized for stashing. A 3 mm punch vivisection of the left impertinence had been performed because of the suspicion of chromhidrosis according to the positioning and look of the stashing. Histopathologic analysis exhibited intracellular brown, unheroic fragments on hematoxylin and eosin (H&E) staining, along with glandular structures with chopped off stashing. Under a UV excitation wavelength of 360-395 nm, autofluorescence of lipofuscin can be observed in unstained sections of the apocrine glands, and stashing has been examined using luminescence microscopy. Once cytology had been performed on a stashing smear, the cytoplasm of the glandular cells on H&E demonstrated apocrine gland cells with lipofuscin in the form of dark, unheroic brown colors (Fig. A & B). The workup confirmed normal bilirubin and full blood count. This information, along with the clinical history and physical examination, were specific to chromhidrosis. Because he still has persistent hiding from his bilateral malar cheeks, the case was relieved after receiving the opinion and has rejected rehabilitation thus far.

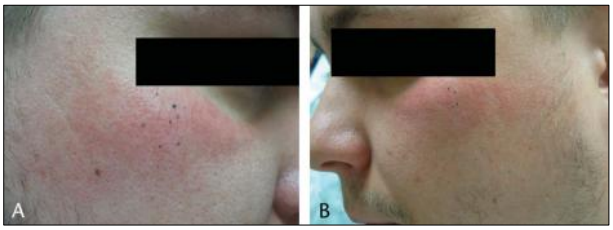

Fig 1(A & B): Black-colored secretions from the right and left malar cheeks are visible upon mild exertion

Discussion

The apocrine or eccrine glands ability to produce colored sweat is an essential characteristic of chromhidrosis, a relatively unusual idiopathic disorder. The color is generated by lipofuscin granules that accumulate in the sweat glands in higher quantities or in a more deteriorated form.[1-6] The pigment found in lipofuscin generally built up linearly with their ages, but in pathologic Under certain circumstances, its rate of the production may increase. Considering it doesn't seem to a specific antibody to lipofuscin, fluorescence is most often utilized to detect it [7, 8]. Depending on the level of oxidation, transpiration can be yellow, blue, green, brown, or black, according according to certain reports. 6. However it can also happen in the axilla, areolae, groin, or various locations, the bulk of apocrine chromhidrosis scenarios have been described on the malar cheeks [9, 10]. Aerobic activity or emotional stress are two distinct instances of circumstances that can cause the colored sweat. Despite a single incident has been documented in young people, chromhidrosis typically begins before puberty [11]. Both pathologic and psychological variables are taken into thought while detecting or cleaning up a suspected case of chromhidrosis. Hyperbilirubinemia, bleeding diathesis, alkaptonuria, poisoning, and pseudochromhidrosis comprise the differential explanations. The condition known as pseudochromhidrosis, which is usually brought on by medication applied to the skin, garment dyes, or chromogenic bacteria, causes transpiration to turn colored at the skin's surface. Twelve Additionally, eccrine chromhidrosis is extremely frequent compared to apocrine chromhidrosis and is caused by the eccrine glands dumping water-soluble colors [10]. Chromhidrosis can be diagnosed histologist using a variety of staining strategies that target lipofuscin pigments.

The apical part of the secretory cells of the apocrine glands could display more lipofuscin granules on H&E [4]. Lipofuscin granules can also fluoresce at a wavelength of 360-395 nm, and anything that comes within touch with secretions can identically autofluoresce at this wavelength [13]. Furthermore, lipofuscin granules provide positive results whenever exposed with Oil Red O and Periodic Acid-Schiff stains [6]. Schmorl reduction stains [13] and an examination of colored sweat under a wood lamp can provide positive results in certain situations [14, 15]. Apocrine chromhidrosis was additionally discovered using electron microscopy in one instance, displaying characteristic vacuoles with myeloid bodies that correlated to disintegrated phospholipids [6]. The workup of chromhidrosis may involve psychological evaluations in addition to histological considerations. Normal laboratory readings help rule out various possibilities from the differential diagnosis, but bad laboratory results are not linked to chromhidrosis. When hemostasis has been disrupted bleeding diathesis can be treated out with the use of a normal complete blood count. Hyperbilirubinemia can be cleared out by normal blood bilirubin levels. It is feasible to rule out infectious pseudochromhidrosis by using routine bacterial and fungi cultures [15]. Urinary homogenistic acid testing can be used to rule out alkaptonuria, an illness of metabolism that causes the urine to darken [16]. Effective treatment for chromhidrosis is still problematic and primarily focuses on secretion decreasing techniques. Three important off-label apocrine medicinal properties. possibilities have been identified by a review of the literature on chromhidrosis treatment options.

Chromhidrosis: 20% aluminum chloride hexahydrate solution (Drysol), topical capsaicin cream17-19, and botulinum toxin A in a single instance, facial chromhidrosis recovered for up to 19 weeks followed treatment with botulinum toxin A. It appears that the mechanism involves

inhibiting acetylcholine release at the motor neuromuscular end plate, which precludes the sweat glands from receiving parasympathetic input later on. Despite 20% aluminum chloride hexahydrate solution and capsaicin cream usually offer short-term secretion the alleviation, some patients believe them to be poorly tolerated because of burning and erythema. Since there are currently no recognized beneficial treatments for chromhidrosis, the condition is likely to recur, however symptoms could decrease with age as apocrine glands eventually decline. In conclusion, chromhidrosis is a rare idiopathic condition which includes colored secretions from apocrine or eccrine glands and requires clinicopathologic correlation for a definitive diagnosis. whereas there are no known permanent effects of chromhidrosis, patients should be enlightened and reassured about the condition, and treatment efforts ought to concentrate toward diminishing the frequency of secretions. Additional study is needed to compare the long-term efficacy and tolerability of current treatments for chromhidrosis.

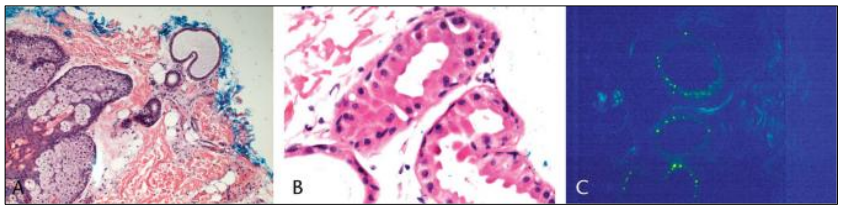

Fig 2 A: Apocrine glands are visible on H&E stain in the low-power picture of the 3mm punch biopsy taken from the left malar cheek, B. Ectopic apocrine glands in the dermis are indicated by decapitation secretion in the glandular structures of the high-power section of the 3mm punch biopsy of apocrine glands from the left malar cheek on H&E stain and C. Increased lipofuscin autofluorescence (bright green) under UV wavelengths of 360-395 nm is seen in the 3mm punch specimen of apocrine glands. from the left malar cheek, which is suitable with the diagnosis of chromhidrosis

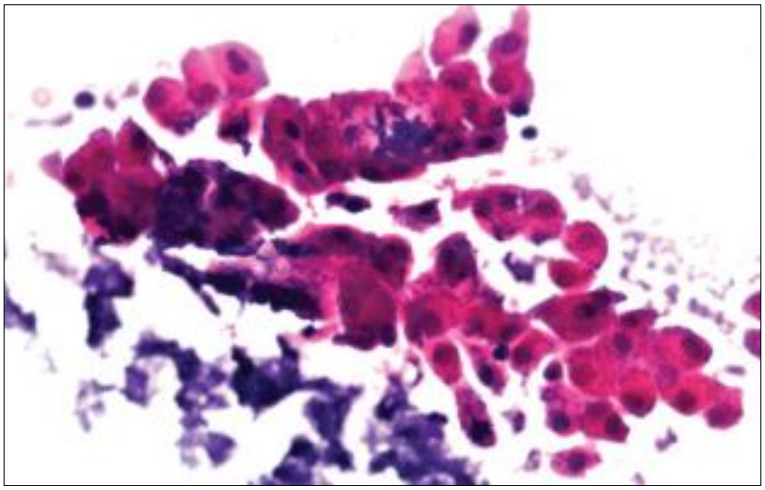

Fig 2 D: Apocrine gland cells featuring lipofuscin are detectable in the cytoplasm of the cells inside the gland on H&E stain as a dark yellow-brown pigment, according to cytology from secretion smear.

Information about eccrine chromhidrosis is sparse in the medical literature. As far as we are understanding, Table 1 lists all instances of eccrine chromhidrosis that has been detected published to date.

Table 1: Literature review of eccrine chromhidrosis

Author	Year	Complaints	Color of sweat	Proposed etiology
Kawakami and Hidano	1987	Punctate greenish macules	Green	Hyperbilirubinemia, water-soluble bilirubin converted into biliverdin.
Kanzaki and Tsuda	1992	Greenish pigmentation of palms and soles with pompholyx	Green	Hyperbilirubinemia, water-soluble bilirubin converted into biliverdin.
Allegue *et al.*,	1996	Localized green pigmentation	Green	Hyperbilirubinemia, water-soluble bilirubin converted into Biliverdin
Cilliers and Beer	1999	Staining of uniform and lingerie	Red	Red color agent in prepacked tomato snack
Lee *et al.*,	2010	Pompholyx with green-colored vesicle on palms	Green	Hyperbilirubinemia, water-soluble bilirubin converted into Biliverdin
Krishnaram *et al.*,	2012	Yellow stain of under clothes	Yellow	Tartrazine, a yellow azo dye in bisacodyl tablets
Triwongwarana *et al.*,	2013	Acral green pigmentation	Green	Hyperbilirubinemia, water-soluble bilirubin converted into Biliverdin
Keum *et al.*,	2015	Pompholyx with greenish pigmentation of palms and soles	Green	Hyperbilirubinemia, water-soluble bilirubin converted into Biliverdin
Ghosh *et al.*,	2015	Blue green pigmentation of upper and lower limbs	Green	Consumption of high copper-containing homeopathic medicine.
Present case	2016	Red staining of vests	Red	Coloring agents present in cranberry juice

Based on the study results currently readily available, the causes of eccrine chromhidrosis can be grouped into several different groups. Externally caused by the abuse of drugs that contain quinines, 50 colorings that imitate tartrazine [59], coloring/seasoning molecules found in dietary supplements [52], and heavy essence that resembles Bobby [51, 62]. Endogenous associated with liver disease-related hyperbilirubinemia. Greenish abrasions of the soles and triumphs, with or without pompholyx-like lesions, are apparent in cases. Green-multicolored sweat is thought to be the result of an oxidative mechanisms that convert brown-multicolored water-answerable direct bilirubin into green-multicolored biliverdin as it moves through the eccrine glands [55-58, 60-61]. Our case is a case of eccrine chromhidrosis, conceivably due to excretion of red color present in the cranberry juice into the integumentary system. A temporal connection between exposure and reappearance of the red sweat on elimination and reintroduction of the juice during the trial workup ensures our opinion. An comparable case in point was recorded by Cilliers and de Beer, in which the red-hued staining of the unmentionables was due to the coloring pigmentation found in a tomato snack, for which the case was a fetish [52]. One non-antibiotic alternative for reducing UTIs is cranberry juice, especially is notably recommended for sexually active adult women with sporadic UTIs and older patients [63]. In the commercially available medications of cranberry juice, distinguish from the naturally readily available anthocyanin color in the cranberries, red azo colorings are utilized to conduct the red color to the drink [64]. These colorings are easily soluble in water, which is essential for their excretion in sweating [54, 59]. Hence, the sanguine abrasion of sweat in our instance may be pertaining to the displacement of the unmodified color (anthocyanin and azo color) present in the juice into the eccrine glands.

It is unable to decide if the abrasion has been triggered by red azo or anthocyanin color, considering that the eccrine glands are the sole glands that excrete the color. It would probably have been straightforward to figure out the precise agent triggering the chromhidrosis if mass gamuts a sensible method for determining out the basic composition of samples, measuring the mass of patches and motes, and elucidating the motes' chemical structure had been employed [65].

1. The unique characteristics of the medical condition is one of the case's highlights.
2. Subsequently cranberry juice coloring-induced eccrine chromhidrosis, which has not yet been reported to the greatest extent of our knowledge. Since clients have developed a habit of ingesting readily accessible health drinks, this paper additionally discusses the complex adverse implications of these beverages.

Pseudochromhidrosis

Case Report 01: A 9-year-old boy who weighted 28 kg revealed signs of an establishing red facial abrasion. For one and a half months, he observed the cheilitis treatment. He started experiencing lip vexation, pain, and swelling 10 days ago after a new emollient was introduced which included urea, light liquid paraffin, white soft paraffin, and glycerol. Gradually, the pain and itching diminished as the emollient was abandoned. He started experiencing greensickness around his mouth five days ago, and it eventually extended to other areas of his face. It appeared noticeable while perspires and heading to the academy during the day. Curiously, after he got home and took a wash, the greensickness vanished. Based on reports, he was in good health, had no previous medical history, denied taking any prescription drugs during the last two months, and had no bleeding from any other source. His ancestors weren't important. Urine, coprolite, slaver, and gash all displayed typical colors. A cutaneous examination exhibited profuse erythema over the face, minor lip skin exfoliation, and mouth angles (Fig. 01). He obtained treatment for antipathetic contact dermatitis and had been given two antihistamines: an H_2 blocker and 15 mg of prednisolone. By the evening of the following day, the greensickness had extended to the knee, stomach, and shoulder. After the bath, the child's greensickness completely subsided and they were absolutely asymptomatic.

During the phone conversation, the case was called for review and advised to cease all therapy. An fragrance red-multicolored stashing was attached to each an individual's body up to the knees on the morning of the third day (Fig. 2a and b). When brushed vigorously with 100% alcohol, normal-colored skin was exposed (Fig. 2c). There was no transpiration autofluorescence visible beneath the Wood's beacon. The official diagnosis of pseudochromhidrosis was improved. Repeated biochemical testing, include clotting profile and urinalysis, were within normal ranges. No organism had been identified when skin tar from the face had been collected and stained with Gram stain. Erythromycin 250 mg administered three times a day and topical clindamycin embrocation twice a day were administered to the adolescents; however, the clindamycin embrocation had to be terminated because it produced excruciating pain and vexation on the lip. With the exception of a tiny hem of erythema enclosing the mouth, all lesions were resolved by the morning of the fourth day (Fig. 03). For a seven-day period, the patient was given directions to keep taking oral erythromycin. Their parents were informed over telephone conversations, even though the circumstance in no way impacted the clinic. The lesions were fully visible and declined to flare up over the next period of two months. Occurrence of lesions with bacterial etiology supported by antibiotics. Perioral erythema suggested that the infection originated in the lip. Pseudochidrosis as a result of secondary infection followed aggravating contact dermatitis of the lips was the the ultimate conclusion.

Table 2: Pseudochromhidrosis in English literature

Gender	Age	Sweat color	Involvement	Presumptive cause	Cultures	Authors	Year
NA	NA	Red	Red dye in uniforms	Red dye in uniforms	NA	Poh-Fitzpatrick *et al.*	1981
NA	NA	Blue	Copper salts on skin surface	Copper salts on skin surface	NA	Hurley *et al.*	1987
Female	39	Red	Face	Bacterial origin	Negative	Thami and Kanwar *et al.*	2000
Male	63	Brown	Palms	Self-tanning products (Dihydroxyacetone)	NM	Yoshida *et al.*	2002
Male	36	Brown	Palms	Self-tanning products (Dihydroxyacetone)	NM	Yoshida *et al.*	2004
Female	10	Red	Neck	Bacterial infection	Negative	Singal and Thami *et al.*	2004

Male	57	Blue	Head, neck	Furfur, Bacillus species, lansoprazole	Furfur, Bacillus species but not B. oereus	Hill *et al.*	2007
Male	26	Black	Palms	Corynebacterium species	Corynebacterium	Rodriguez-martin *et al.*	2010
Female	28	Blue	Arm, elbow, forearm	Topiramate, bacillus species	bacillus species	Castela *et al.*	2009
Male	36	Brown	Palms	Corynebacterium	Corynebacterium	Panoulias *et al.*	2010
Female	19	Pink	Cheecks, palms, toe, nails	S. marcescens	S. marcescens	Harada *et al.*	2012
Male	9	Red	Face, shoulder, elbow, knee	Bacterial origin	NA	Present case 1	2012
Male	20	Black	Both palms, right leg	Corynebacterium species	Corynebacterium species	Present case 2	2012

NA: Not available, NM: Not mentioned, M. furfur: *Malassezia furfur*, *B. cereus*: *Bacillus cereus*, *S. marcescens*: *Serratia marcescens*

To the greatest extent of our knowledge, only 11 cases of pseudochromhidrosis have been reported, with a single instance of three cases that indicated that bacteria played a significant part. Gram-staining and culture of skin leavings did not reveal any pathogen within either of the two cases of pseudochromhidrosis previously discovered from the Indian key; yet, the dramatic concurrence of lesions with antibiotics and the absence of other causes of colored sweating suggested bacterial pseudochromhidrosis. Additionally, vivisection is an avenue of detecting chromhidrosis. When the etiology is exogenous, pseudochromhidrosis can be managed smoothly.

To the best of our knowledge, there is no evidence that red pseudochromhidrosis subsequent irritating contact dermatitis of the lip (and the development of lesions subsequent systemic corticosteroid use) that were taken occurs. In this specific instance, two siblings experienced black pseudochromhidrosis as a result of a Corynebacterium infection, most probably forced on by contact with an unrelated common source. Black pseudochromhidrosis of the leg is currently not documented, however the fact that black color change triggered by pseudochromhidrosis is already noted in the literature.

Table 3: Differentiating features of various chromhidrosis [67-69]

Variable	Apocrine chromhidrosis	True eccrine chromhidrosis	Pseudo eccrine chromhidrosis
Definition	State in which the apocrine glands emit colored sweat The degree of lipofuscin oxidation determines color.	Water-soluble pigments are released through the eccrine glands in an exceedingly rare disease.	condition in which transpiration, which is usually colorless, becomes colored after entering into contact with extrinsic chemicals or chromogenic microbiological substances
Etiology	process which takes place externally when sweat and oxidized lipofuschin pigment incorporate or deposit inside the sweat gland after they spill onto the skin's surface.	It is brought on by prescriptions or water-soluble dyes that interact with sweating inside the gland and afterwards manifest on the outside.	Extrinsic chromogens, including paints, chemicals, dyes, and chromogenic bacterial products, are to blame.
Glands involved	Apocrine glands	Eccrine glands	Eccrine and apocrine glands
Site	Axilla, groin, areola, facial skin	All over the body	All over the body
Histopathology	Lipofuschin granules in biopsy specimens	Normal	Normal
Diagnosis	Autofluorescence at 360nm on skin, stained clothes and biopsy Histopathology findings	History of ingestion of any water-soluble pigment or dye	Bacterial or fungal cultures Improvement with antibiotics and antiseptic scrubs Diagnosis of exclusion
Treatment	Topical capsaicin cream, 20% aluminium chloride hexahydrate solution, botulinum A toxin	Ceasing consumption of soluble pigment	Oral and topical antibiotics, antiseptic scrub
Prognosis	Usually, recurrent. Diminishes with age due to natural regression of the apocrine glands	Variable	Good

Conclusion

The stated case of pseudochromhidrosis illustrates the unique and rare occurrence of pigmentation on the skin caused by external sources, notably colorants in a regularly taken health drink. This study highlights how crucial it is to be aware of potential adverse impacts of commercial items since they may result in odd dermatological complaints. Following irritating contact dermatitis, pseudochromhidrosis is a clinical detection that emphasizes the importance of attentively reviewing and comprehending the patient's medical history, product ingredients, and environmental factors. The bacterial etiology of such cases is additionally confirmed by the effective recuperation of symptoms following adequate antibiotic treatment. For increasing awareness and improve screening and treatment plans to assist individuals with comparable illnesses, further investigation and documentation in the medical literature are essential.

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