Nevoid hyperkeratosis of nipple: Nevold or hormonal?

Sir,
We read with the interest the article “Nevoid hyperkeratosis of nipple – a report of two cases” in your journal recently.[1] We hereby report a case of nevoid hyperkeratosis of nipple and areola (HNA). We were intrigued by the term 'Nevoid' and hence try to debate as to how appropriate is the use of this terminology. Also, till date only two cases of nevoid hyperkeratosis of nipple have been reported from India.[1,2]

A 21-year-old female presented to us with asymptomatic brown-colored rough raised lesions on both the nipples since the age of 13 years. The lesions increased in size during pregnancy. There was no history of pruritus, alteration in the lesion with menstrual cycle and complications such as ulceration, bleeding, discharge, pain or retraction of nipple. There was no history of any other skin lesions at that site.

On examination both the nipples were covered with diffuse, hyperpigmented, verrucous and hyperkeratotic plaque [Figures 1]. No associated anomalies of the nipples and breast were seen. The skin biopsy of the lesion showed irregular acanthosis and papillomatosis with increased melanization of keratinocytes. Melanocytes were normal in number [Figure 2]. Based on clinical and histopathological features we reached the diagnosis of nevoid hyperkeratosis of the nipple. Since the patient was pregnant (five months gravida) we counseled her and advised follow-up after delivery for treatment.

HNA is a rare clinical condition. Initially described in 1923,[2] HNA is classified into three categories according to the classification proposed by Levy-Frenckel in 1938.[3,4] Type I: associated with an
Considering the above classification, our patient had Type III HNA. Amongst the various types, nevoid form of the disease is extremely rare, usually seen in women in the second or third decade of life. There are doubts on whether nevoid hyperkeratosis of the nipple and areola is a distinct entity or a clinical presentation of various dermatoses. Type III HNA is seen in females at puberty, those of childbearing age, pregnancy and also in males receiving hormonal therapy for prostate cancer. It may also be seen in females and males without the above mentioned conditions. Pregnancy may increase the size of the lesions. Since our patient’s condition began at puberty and worsened during pregnancy the term hormonal hyperkeratosis of nipple would be more apt.

Even Mehanna et al. suggested that Type I should not be considered as HNA as it is associated with the epidermal nevus and hence the term should be reserved for only Types II and III. They also suggested that the term ‘nevoid’ be replaced by ‘idiopathic’. The term nevoid (nevus-like) means odd or abnormal that stems from a heritable or embryogenic fault. So one really wonders whether the term nevoid is truly applicable here and hence revision of the term has to be considered. Hence we support the view of Mehanna et al. that the term nevoid should not be used for the Type III variant of HNA.

Perez-Izquierdo et al. proposed an alternative classification of two types:
1. Idiopathic or nevoid
2. Secondary to other dermatoses.

The main cause of concern for patients of HNA is the cosmetic appearance of the nipple and areola. Patients should be asked to look out for any changes in the breasts. They should be counseled about the condition and the treatment that may take a long time. Treatment with one of the medications as mentioned by Veeranna et al. should be continued for at least six months before it is considered a failure. Sometimes lesions recur and in some patients lesions don’t respond to treatment. Since our patient was pregnant, counseling was done and we asked

HNA, of unknown etiology, an isolated finding.

Figure 1: Pretreatment (a) and post-treatment (b) photographs of palms and soles

Figure 2: Papillomatosis and acanthosis (H and E, 200x)

epidermal nevus, Type II: associated with other dermatoses (congenital, acquired or erythrodermic ichthyosis, acanthosis nigricans, Darier’s disease, chronic eczema, cutaneous T-cell lymphoma) and Type III: (Nevoid
Candidal intertrigo: Treatment with filter paper soaked in Castellani’s paint

Sir,

Candidal intertrigo involving predominantly the fourth and fifth interdigital space of the foot is common among people involved in wet work and wearing occlusive footwear. The infection improves with topical antifungals but recurs unless the precipitating factors are avoided. Since it is essential to keep the area dry, various methods such as using cork or a gauze piece rolled and kept between the toes are tried. Castellani’s paint is an excellent preparation for tinea cruris and moniliasis of intertriginous areas.

We soaked regular blotting paper with Castellani’s paint and allowed it to dry. The magenta-colored blotting paper was cut into strips and placed in the interdigital space and taped [Figure 1] once daily at bedtime for five days. Although any antifungal lotion could have been studied we chose Castellani’s paint since it is colored and visual appreciation of the skin staining and release of the drug into water was essential for the study.

Candidal intertrigo was confirmed in four patients by Gram’s staining. All the patients improved with treatment. The blotting paper was used to ensure dryness of the interdigital space and Castellani’s paint to control the infection. It was observed that the treatment site was discolored by the use of magenta-colored paper, thus confirming the release of the dye. To further confirm that the dye is released the air-dried paper which was stored for one day was placed in a test-tube with water and held in the palms to raise the temperature of the water. The water turned magenta confirming the release of the dye from the paper. To further ensure that the blotting property of the paper is retained following soaking with the paint and drying, 3 ml of water was placed in a 5 ml...