



PSEUDOFOLLICULITIS BARBAE SINE QUO NON DEPILATION : AN UNPRECEDENTED SIDE EFFECT OF CHEMORADIO THERAPY

Dermatology

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ABSTRACT

Pseudofolliculitis is a foreign body inflammatory reaction characterized by papules and pustules, commonly over jaw area. It is usually associated with shaving. Sometimes, it is a simple cosmetic problem, but can present as an intense pruritic and debilitating condition. It has never been described as a side effect of chemotherapeutic drugs and radiation therapy. We report this condition in a patient of metastatic carcinoma tongue on chemoradiation.

KEYWORDS

pseudofolliculitis, chemotherapy, radiation

INTRODUCTION:

Pseudofolliculitis is an inflammatory follicular and perifollicular reaction to the entrapped hair commonly seen in adult males.^[1] Its prevalence ranges from 40-80%. It is mostly seen at beard area in males and pubic area in females. The most common predisposing factors include shaving, plucking or waxing. Familial and racial predisposition has also been seen. Herein, we describe a case of male with carcinoma tongue who developed pseudofolliculitis barbae. To the best of our knowledge, we are reporting first case of pseudofolliculitis associated with chemoradiotherapy.

CASE REPORT:

A 35 year old male presented to dermatological department with the chief complaints of pruritic lesions on the beard area since 4 months. The patient was a known case of carcinoma right lateral border of tongue. Four months before presenting to us, the patient had received 6 cycles of chemotherapy (paclitaxel, carboplatin and granisetron) and 34 cycles of radiotherapy. There was no history of shaving or any hair depilation practice in the last 6 months.

On clinical examination, multiple, discrete and hyperpigmented follicular papules over the beard area were seen. [Figure 1] There was no erythema, scaling or crusts. Scalp and beard area showed complete hair loss. The body hair were normal in texture. The patient was concerned about malignant potential of the condition. Dermoscopic examination of the lesion with DermLite DL4 revealed curved hair attached to the skin with adjacent blue grey thick lines and white areas of fibrosis, consistent with findings of pseudofolliculitis.^[2] [Figure 2] Histopathological examination of the lesion was done in order to remove further doubts in diagnosis, which showed ruptured follicle with foreign body giant cell admixed with histocytes and lymphocytes. [Figure 3] The patient was explained about the benign nature of condition. He was given topical retinoid tretinoin cream (0.025%), after which the condition started improving. The patient almost recovered from this condition in two months.



Fig 1: The Figure Shows Papular Pseudofolliculitis Lesions On The Face And The Neck Area.



Fig 2: Dermoscopic picture shows curved hair follicle, white areas of fibrosis and blue grey thick lines

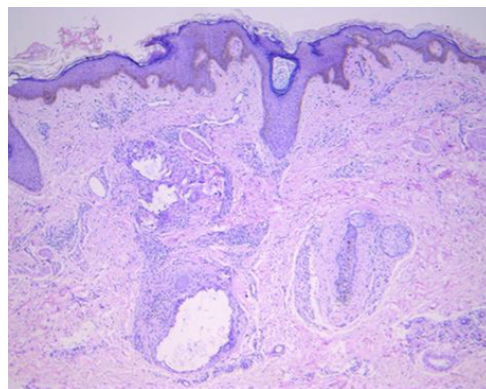


Fig3:Partially ruptured follicle with dilated follicular cavity containing keratin and surrounded by infiltrate of foreign body giant cells, histocytes and lymphocytes.

DISCUSSION:

Pseudofolliculitis is a foreign body reaction to the aberrant cut ends of the hair follicle. It usually occurs in association with faulty depilatory practices.^[3] The sharp ends of the cut hair makes contact with epidermis and again re-enter to the skin. On removing the aggravating factor, spontaneous resolution of the process occurs as hair grows upto length of 10 mm and pulls hair out of inflammatory papule.^[1] The treatment aims at reducing inflammation and hair penetration. Avoidance of depilatory practices for atleast 4 weeks is preliminary management. The hair should be trimmed upto 0.5 mm to 1 mm to prevent this condition. Other modalities include topical and oral

antibiotics, chemical peels, topical retinoids, topical eflornithine cream and laser hair removal.^[4,5]

Acute folliculitis has already been reported with epidermal growth factor receptor inhibitors and tyrosine kinase inhibitors. Chemotherapeutic drugs disrupt the anagen cycle and cause dystrophic anagen and catagen response pathways.^[6] These also affect hair matrix cells resulting in narrowed or defective hair shaft. Radiation dermatitis is accompanied by disappearance of follicle structures and increase in dermal collagen. Radiation affects proliferating anagen cells more than telogen hair cells. All these pathomechanisms explain the root cause behind pseudofolliculitis in our patient without any depilatory practices. Due to concomitant use of chemotherapy and radiation in this patient, pseudofolliculitis as a side effect can not be attributed to any single mode of treatment.

This case emphasize the importance of awaring the physician to the possible adverse effect chemoradiation therapy as “pili incarniti”.

REFERENCES :

- 1) Puhan MR, Sahu B. Pseudofolliculitis corporis: A new entity diagnosed by dermoscopy. *Int J Trichol.* 2015;7:30-32
- 2) Malhotra SK, Muralidharan E, Singla C, Budhwar J. Dermoscope as a diagnostic tool in pseudofolliculitis corporis: a dermatologist's viewpoint. *Egypt J Dermatol Venerol.* 2019;39(2);102-4.
- 3) Strauss JS, Kligman AM. Pseudofolliculitis of the beard. *Arch Dermatol Symp.* 1956;74:533-42.
- 4) Kauvar ANB. Treatment of pseudofolliculitis with a pulsed infrared laser. *Arch Dermatol.* 2000;136:1343-6.
- 5) Kaliyadan F, Kuruvilla J, Ojail HY, Quadri SA. Clinical and dermoscopic study of pseudofolliculitis of beard area. *Int J Trichology.* 2016;8:40-2.
- 6) Kanwar AJ, Narang T. Anagen effluvium. *Indian J Dermatol Venereol Leprol.* 2003;79:604-12.