INTRODUCTION

Circle hairs (CHs) represent a body hair growth disorder which is characterized by asymptomatic presence of hairs in typical circular or spiraliform arrangement. It is not associated with follicular or inflammatory abnormalities. CHs are rarely reported, probably underestimated, as medical consultation for CH only is rare in practice. It needs to be differentiated from rolled hairs, which is a relatively common disorder of hair growth associated with follicular hyperkeratosis and keratin plugging. Trichoscopy is a noninvasive technique to confirm the diagnosis without biopsy. We present a 20-year-old female who presented with CHs over bilateral upper and lower limbs involving extensors.

CASE REPORT

A 20-year-old adult female came to our OPD with a complaint of lesions over both hands and legs. History of waxing was present. There were no features of atopic dermatitis or any other dermatoses. No history of the application of topical medications or cosmetics was present. No history of any trauma could be elicited. There were no systemic complaints, no similar complaint in the past or the family was present. The patient was averagely built with 30 kg weight. She did not have a sedentary lifestyle. Physical examination revealed several CHs among normal hairs, especially over hands and legs. On gross examination, lesions appeared as papules over forearms and legs [Figure 1a and b]. Trichoscopy at ×150 magnification showed CHs located under a thin skin layer corresponding to outer stratum corneum, whereas others were protruding out of skin [Figure 2]. In between normal hairs were seen. It showed almost perfect round configuration. After pulling, CH showed a characteristic “question mark”...
appearance [Figure 3]. Histopathologic evaluation was not done as the patient did not agree for it.

**DISCUSSION**

CHs were first described in 1963. CHs tend to grow in elderly, hairy, and obese males, predominantly on the torso and thighs.

The pathogenesis of CH remains obscure. One theory suggests that CH has a small hair diameter that makes it difficult to penetrate stratum corneum and because of that the hair grows in a circular track and a subcorneal location. Other theory claims that the follicular ostia are continuously open and hence the hair does not need to perforate the stratum corneum. Based on this, CH is considered to be a genetically predetermined disorder. The possibility that CH corresponds to vestigia (or remnants) of the mammal undercoat has also been suggested.

CHs are rarely reported as they are asymptomatic in nature. Tightly coiled hair shafts get embedded in stratum corneum and are seen as small dark circles next to hair follicle. Hair can be extracted and rolled out but recoils. CH needs to be differentiated from rolled hairs, which is a relatively common disorder of hair growth associated with follicular hyperkeratosis and keratin plugging. Rolled hairs are not perfectly circular and appear as irregularly coiled within a hyperkeratotic papule and are associated with signs of inflammation. Rolled hairs are usually associated with keratosis pilaris, scurvy and have also been associated with corticosteroid therapy, xerosis, neurodermatitis, atopic dermatitis, ichthyosis, and palmoplantar keratoderma.

CHs did not present any shaft abnormality. Moreover, it displayed that some CHs were located under a thin skin layer, whereas others were protruding from the skin. A possible explanation for this is that the “rolling” initially takes place below the stratum corneum; then, with epidermis turnover, the hair protrudes from the skin. Whether the dilated infundibulum is the primary cause of CH, or secondary to the subcorneal hair growth, is not well established till today which can be an area of future research.

Cases reported in literature showed that CHs occurs in elderly males only and being associated with other dermatosis. No young female of 20 years of age like ours has been reported to have CHs. A rare association of pili multigemini and CHs are reported in a young girl with dermatoscopic changes like ours.

Histopathology of CH shows the presence of a “river bed” dilated follicle infundibulum with entrapped hair shaft. We could not do biopsy in our patient as the patient was not willing for the same and moreover, it would not give any added advantage.

Trichoscopy is a noninvasive technique that has been utilized for the evaluation of different hair.
Treatment includes plucking of hairs, but they may regrow. Ablation with ruby laser can be considered as a therapeutic option.

Financial support and sponsorship
Nil.

Conflicts of interest
There are no conflicts of interest.

REFERENCES
1. Levit F, Scott MJ Jr. Circle hairs. J Am Acad Dermatol 1983;8:423-5.
2. Smith JB, Hogan DJ. Circle hairs are not rolled hairs. J Am Acad Dermatol 1996;35:634-5.
3. Contreras-Ruiz J, Duran-McKinster C, Tamayo-Sanchez L, Orozco-Govarrubias L, Ruiz-Maldonado R. Circle hairs: A clinical curiosity. J Eur Acad Dermatol Venereol 2000;14:495-7.
4. Argueta EE, Tschen JA. Hairs with an irregular shape. Cutis 2014;94:E4-5.
5. Lacarrubba F, Misciali C, Gibilisco R, Micali G. Circle hairs: Clinical, trichoscopic and histopathologic findings. Int J Trichology 2013;5:211-3.
6. Nair PA, Kota RS, Gandhi S, Singhal RR. A rare association of pili multigemini and rolled hairs in a young female. Int J Trichology 2016;8:29-31.