Sir,

The introduction of a new metaphorical term, the “tulipoid hair” for an apparently novel trichoscopic finding as a specific marker of anagen effluvium (AE) by Malakar et al., was thought-provoking.[1] However, we wish to highlight certain contradictions that warrant clarification.

AE may arise due to many causes other than cancer chemotherapy and radiation, including pemphigus vulgaris, alopecia areata, postorgan transplantation immunosuppressives, and other drugs, exposure to toxins and X-rays and certain systemic diseases.[2,3] Irrespective of the cause, an abrupt cessation of mitotic activity leading to growth arrest in anagen phase is common to AE. However, the severity of hair loss and corresponding trichoscopic changes seen in a case of AE would depend on the underlying cause and the time duration between the occurrence of the causative insult (e.g. commencement of chemotherapy or azathioprine) or its withdrawal (i.e. cessation of chemotherapy or azathioprine) and the day of trichoscopy.[4] Crucial determinants in chemotherapy-induced AE include the nature, timing, dose, and duration of the drug treatment; patient’s age; history of recent/concomitant radiation; and background nutritional status. Published reports on trichoscopic features of AE (whether chemotherapy-induced or any other cause) are scarce. In their paper, esteemed authors did not mention any details of chemotherapy that are pertinent in determining the trichoscopic features - nature of malignancy for which it was being given, drug composition and protocol of the regime, and whether additional radiation was given and its timing. Thus, at least three factors render the authors' advocacy of a novel metaphoric trichoscopic term “tulipoid hair” inconceivable: (1) scarcity of published literature on trichoscopic features of AE, (2) lack of the aforementioned details of chemotherapy of their patients, and (3) their conclusion based on the observation of features in one-one singular trichoscopic field from just two patients. Even if one may agree with the morphology of these hairs (observed in just two patients of chemotherapy-induced AE) deserving a new terminology, it seems inappropriate to generalize it to AE in general, rather than specifically for chemotherapy-induced alopecia (CIA).

Furthermore, the morphogenesis of authors’ proposed new terminology “tulipoid hair” warrants a deeper assessment.

Figure 1: Reproduced from original Figure 2c, trichoscopic image from the authors’ first case. The red arrow (highlighting the most distal Pohl–Pinkus constriction) and the yellow arrow (“suggesting” a “restored” thick proximal shaft) in the “tulipoid” hair were highlighted by the original authors. Please note: multiple Pohl–Pinkus constrictions (blue arrows) proximal to the most distal elongated tapering constriction and monilethrix-like morphology of the proximal shaft. Neighboring hair shafts (green arrows) have a similar monilethrix-like hair appearance, without elongated distal tapering

Figure 2: Reproduced from original Figure 3b, the trichoscopic image from the authors’ second case who received chemotherapy for 3 weeks. The red arrow (highlighting the most distal site of Pohl–Pinkus constriction) and the yellow arrow (“suggesting” a “restored” thick shaft in the proximal shaft after cessation of chemotherapy) in the “tulipoid” hair were highlighted by the original authors. (a) Appreciate that neighboring hair shafts (green arrows) have a monilethrix-like hair appearance. In addition, there are black dots, and multiple thinning and broken hair shafts; (b) cropped close-up view of the so-called “tulipoid” hair from this image showing monilethrix-like hair appearance with multiple interrupted Pohl–Pinkus constrictions in the hair shaft (blue arrows) involving both the distal end and the shaft proximal to the elongated constricted tapering (marked by red arrow by the original authors)
We believe that the hairs christened “tulipoid” by the authors actually represent monilethrix-like hairs with multiple Pohl–Pinkus constrictions [Figures 1 and 2; reproduced from the original Figures 2c and 3b, respectively] in both cases. The elongated constriction at the distal end giving a distally tapering appearance plausibly corresponds to the metabolic arrest of the matrix following chemotherapy induction. In fact, the image fields in both figures show multiple monilethrix-like hairs (a well-known trichoscopic feature of CIA),[5] in addition to black dots, and thinning and broken hair shafts. Because anagen scalp hairs are in different anagen stages and not perfectly synchronous, the elongated tapering is not expected to be seen in all hairs.

The authors attributed the normal thickness of the proximal portion of “tulipoid hairs” to follicular activity resumption following cessation of chemotherapy.[1] This attribution seems incongruous to their stated time-lag of trichoscopic assessment (done within 3–4 weeks of chemotherapy). The resumption of follicular activity following cessation of chemotherapy is not instantaneous; it takes a few weeks.[2‑4] The proposition of instant “restoration of normal shaft thickness owing to immediate follicular activity resumption” in patients evaluated by trichoscopy after 1 month/within 3 weeks of chemotherapy seems untenable.

We sincerely believe that the thickness of the proximal portion of “tulipoid hairs” reflects the shaft caliber being “retained” due to nonprogression of the distal tapering within the given time frame of exposure (3–4 weeks) to chemotherapy instead of being “regained” within such a short time of cessation of the trigger. In our humble submission, the thicker proximal portions represent incomplete dystrophic transformation instead of immediate recovery following cessation of chemotherapy.

To conclude, (1) “tulipoid” hair seems an unnecessary and unjustified addendum to the lexicon of metaphoric trichoscopy terms; (2) the term is incongruous with its morphology, with minimal, if any, resemblance to the tulip hair, justifying “tulipoid,” and (3) the described hairs represent CIA rather than the entire spectrum of AE.

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Conflicts of interest
There are no conflicts of interest.

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