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Dermoscopy and confocal microscopy for different chemotherapy-induced alopecia (CIA) phases characterization: Preliminary study.

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ABSTRACT

BACKGROUND: Chemotherapy-induced alopecia (CIA) affects 65% of patients receiving chemotherapy regimens and is often identified with the massive hair loss stage. Reflectance confocal microscopy (RCM) is a noninvasive technique used in alopecia assessment for disease characterization and state of activity. **OBJECTIVE:** To describe RCM features of CIA in different timing and identify specific phases of alopecia development. **METHODS:** A total of 16 patients treated with chemotherapy underwent dermoscopy and RCM evaluations four times during the observation: 2 and 4-6 weeks after starting and 3 and 6 months after the end of chemotherapy. Ten examinations for each stage were performed. **RESULTS:** Four phases of CIA have been identified. Initial hair loss showed specific dots not previously described, named CIA dots. massive hair loss phase was characterized by black dots (10/10 pt), CIA dots (8/10 pt) and hair shaft abnormalities. Three months after the end of chemotherapy, during the partial regrowth phase, 10/10 patients showed thin hair in regrowth and 8/10 presented black and yellow dots. At 6 months, normal hair in regrowth appears in all patients (total regrowth phase). **CONCLUSIONS:** Chemotherapy-induced alopecia has to be considered as a dynamic process with specific phases characterized by distinctive dermoscopic and confocal features. © 2019 John Wiley & Sons A/S. Published by John Wiley & Sons Ltd. **KEYWORDS:** CIA dot; black dot; chemotherapy-induced alopecia; confocal microscopy; thricoscopy; yellow dot PMID: 31556477 DOI: 10.1111/srt.12790