Confluent and reticulated papillomatosis: a novel onset due to spindle-inhibiting and alkylating chemotherapeutic agents

Olivia R. Negris, M.A., 1 Julie M. Bittar de la Cruz, M.D., 2 Vida Ehyae, M.D., 3 Kyle T. Amber, M.D., 2,4
1 Rush Medical College, 2 Department of Dermatology, 3 Department of Pathology, 4 Department of Internal Medicine

Introduction

Confluent and reticulated papillomatosis (CARP) is a rare disease of the epidermis due to disordered keratinization that has a chronic course.

CARP most often manifests as multiple subcentimeter brown to hyperpigmented papules that have scaling, hyperkeratosis, or even atrophy, and may coalesce to form plaques. CARP has not been postulated to arise as a result of medications.

We report a novel case of CARP which developed in the context of a spindle-inhibiting chemotherapeutic agent and the alkylating chemotherapeutic agent use.

Case Presentation

A 65-year-old Black female presented with concern for new hyperpigmented lesions that developed over the past year.

- PMH: of primary adenocarcinoma of the lower lobe of the left lung, status post resection one year prior and seven cycles of paclitaxel and carboplatin chemotherapy
- Physical Exam: numerous nontender, rough, dark papules of varying sizes but consistent pattern are appreciated across the torso and face
- Histopathology: epidermal thinning and papillomatosis, increased pigmentation of the basal layer without an increase in number of melanocytes, rare scattered dermal melanophages

- Diagnosis: CARP
- Treatment: Minocycline 100 mg BID, with significant improvement at 3 months

Skin Findings and Microscopic Evaluation

Figure 1: Left with skin exam findings at initial visit demonstrating extensive hyperpigmented papules coalescing to reticulate plaques across the trunk and arms. Interestingly, there is notable flexural sparing. Right with skin exam findings status-post 3 months of 100 mg BID minocycline therapy.

Figure 2: Histopathology of CARP demonstrating epidermal thinning and papillomatosis, increased pigmentation of basal layer without an increase in number of melanocytes, and rare scattered dermal melanophages.

Conclusion

This is the first case to describe the onset of CARP in the context of the spindle-inhibiting chemotherapeutic agent, paclitaxel, or the alkylating agent, carboplatin. This case report further confirms the utility of minocycline in the treatment of CARP.

References