Background: Collision tumors are defined as two distinct neoplasms that occur in close proximity to one another, but which maintain distinct boundaries. They are often of unexpected discovery and may represent a diagnostic challenge, as clinical and histological presentations do not always coincide. We report the case of a collision of basal cell carcinoma and melanocytic nevus focusing on the dermoscopic aspect.

Observation: A 63-year-old patient with a history of chronic sun exposure presented an asymptomatic skin lesion in his right shoulder. The dermatological examination showed an asymmetric heterochromatic plaque of 1.5 cm in diameter with irregular contours. Dermoscopic analysis of the lesion revealed the presence in the most pigmented portion of an asymmetric pigmented network, a regression area in the center, and ovoid nests and telangiectatic vessels in the less pigmented area. A skin biopsy was done. The histological study showed tumor proliferation of basaloid-like cells at the periphery, with localized retraction slots, these cells sit within a dermal melanocytic tumor proliferation surrounded by a connective stroma harboring melanocytic pigment.

Key message: Tumor collisions consist of two or more independent tumor contingents in the same lesion. This is a rare phenomenon and the combination of a CBC with a nevus is the most common combination. This type of tumor can be difficult for the clinician to interpret, especially for the components of a malignant tumor. Several clinical cases and case studies have reported the usefulness of dermoscopy in order to make the correct diagnosis. In our case, dermoscopy revealed ovoid nests and telangiectatic vascularization suggestive of basal cell carcinoma, whereas the pigmented network and the regression zone supported the diagnosis of melanoma. That is why we were intrigued at the beginning in the diagnosis of this lesion, although the histological diagnosis was easy.