Background: Muir-Torre syndrome (MTS) is an autosomal-dominant disorder characterized by the association of sebaceous tumors or keratoacanthomas with an early onset visceral cancer in the spectrum of Lynch syndrome.

Observations: A total of 20 sebaceous tumors including 18 sebaceous adenoma and two sebaceomas of six patients with MTS were analysed. Two main clinico-dermoscopic features were observed: (1) clinically pink to white papules/nodules with a central crater, dermoscopically characterized by radially arranged, elongated crown vessels surrounding opaque structureless yellow areas at times covered by blood crusts (n=13) and (2), clinically pink to yellow papules/nodules without a central crater, dermoscopically exhibiting a few, loosely arranged yellow comedo-like globules and branching arborizing vessels (n=7). Confocal microscopy was available in three sebaceous adenomas and revealed a good histopathologic correlation; sebaceous lobules were composed by clusters of ovoid cells with dark nuclei and bright, highly refractile glistening cytoplasm. They were delimited by a rim of epithelial cells, corresponding to basaloid cells.

Conclusions: A better characterization of clinical, dermoscopic and confocal microscopy features of sebaceous tumors may improve their recognition and consequently, aid to rise the suspect for MTS.