Localized cutaneous argyria is a rare condition secondary to skin deposition of silver following exposure to substances containing this metal. The clinical appearance and dermoscopy findings require deep melanocytic lesions and particularly melanoma metastasis to be ruled out. Silver deposits are usually confirmed by scanning electron microscopy and/or energy dispersive x-ray spectroscopy. Herein we describe the in vivo reflectance confocal microscopy features observed in one case of localized cutaneous argyria. These features include the presence of a hyperrefractile network in the papillary dermis and a periadnexal dotted bright pattern. In vivo reflectance confocal microscopy might be a useful tool for an early diagnosis of this uncommon entity. This article is protected by copyright. All rights reserved. PMID:26997486