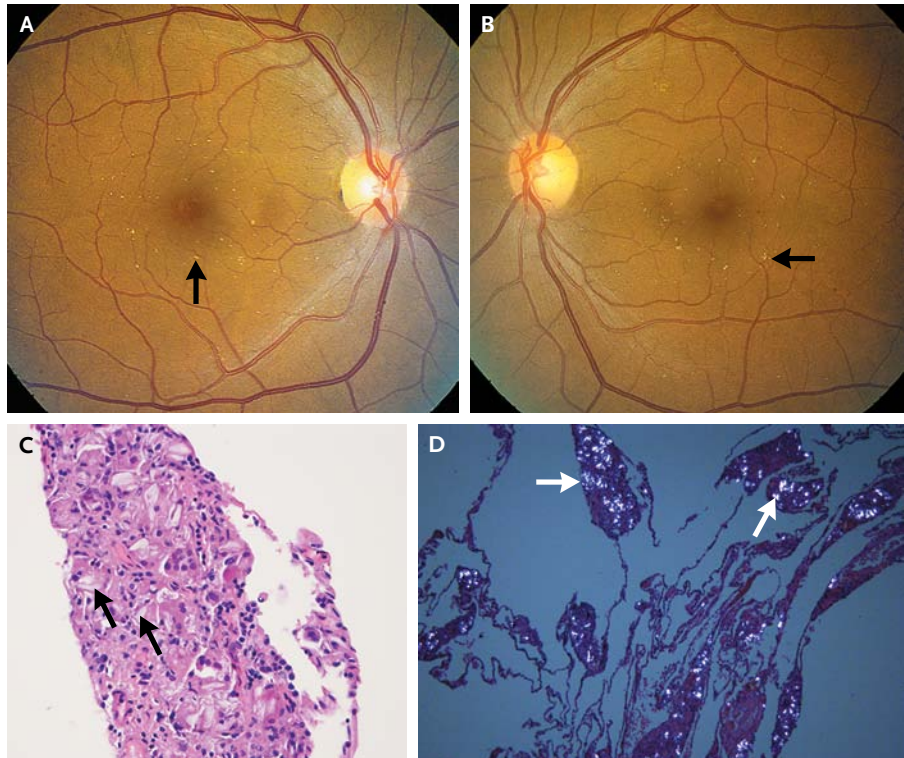


IMAGES IN CLINICAL MEDICINE

Talc Retinopathy



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A 56-YEAR-OLD WOMAN WHO HAD UNDERGONE BILATERAL LUNG TRANSPLANTATION for chronic obstructive pulmonary disease was found to have fine crystals in the inner retina in the macula of each eye (Panels A and B, arrows), although she was asymptomatic. The crystals were consistent with talc retinopathy, and a remote history of long-term intravenous drug use was confirmed. Talc is an inert filler in methylphenidate hydrochloride tablets, which are crushed for intravenous drug use. The talc is then unknowingly injected intravenously. Talc particles are usually fine and are distributed intravascularly and extravascularly in the retina in patients who chronically use intravenous drugs and in whom right-to-left cardiopulmonary shunting occurs through collateral vessels that may develop around sites of pulmonary infarction. However, in a patient with a patent foramen ovale, larger particles may cause retinal artery occlusions and severe vision loss. Review of this patient's previous lung-biopsy specimens revealed interstitial epithelioid granulomas with foreign bodies (Panel C, arrows), giant cells, and abundant polarizable crystalline material typical of talc (Panel D, arrows). The talc particles, although perhaps not the primary cause of the respiratory failure, most likely contributed to chronic lung inflammation and exacerbated the patient's condition.

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