A Case of Idiopathic Sclerochoroidal Calcification

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INTRODUCTION

- Sclerochoroidal calcification (SCC) is a rare, benign eye disease that presents with yellow placoid lesions on diagnostic imaging.[1]
- SCC is under-recognized and often misdiagnosed as a malignancy, leading to costly and unnecessary additional studies and referrals.[1]

CASE PRESENTATION

- An 83-year-old male presented for his annual eye exam with no visual complaints.
- PMHx: HLD, CAD, OSA, HTN, OA
- Rx: amlodipine, ASA, atorvastatin, clopidogrel, lisinopril, clonidine, vitamin D

OPHTHALMIC EXAM

	Right Eye	Left Eye
Visual Acuity	20/40	20/25
IOP	13	13
Pupils	PERRL	PERRL
Visual Fields	full to confrontation	full to confrontation
Conjunctiva/Sclera	white & quiet	white & quiet
Cornea	clear	clear
Anterior Chamber	deep & quiet	deep & quiet
Iris	flat & round	flat & round
Lens	2+ NS	2+ NS
Disc	sharp & pink	sharp & pink
Macula	flat, small drusen	flat, small drusen
Vessels	normal	normal
Vitreous	**posterior vitreous detachment**	syneresis
Periphery	**1dd elevated hypopigmented subretinal lesion at terminal bifurcation of superotemporal arcade with irregular borders & without fluid**	peripheral drusen

LABORATORY STUDIES

Lab	Value	Reference Range
Potassium	4.3	3.5 – 5.0 mEq/L
BUN	16	8 – 21 mg/dL
Creatinine	1.0	0.8 – 1.3 mg/dL
Calcium	9.1	8.5 – 10.2 mg/dL
Albumin	3.9	3.5 – 5.4 g/dL
TSH	1.29	0.5 – 5.0 mcIU/mL

Table 1. Patient's lab values assessing for secondary causes of sclerochoroidal calcification were grossly normal, suggesting an idiopathic disease process.

OPHTHALMIC IMAGING

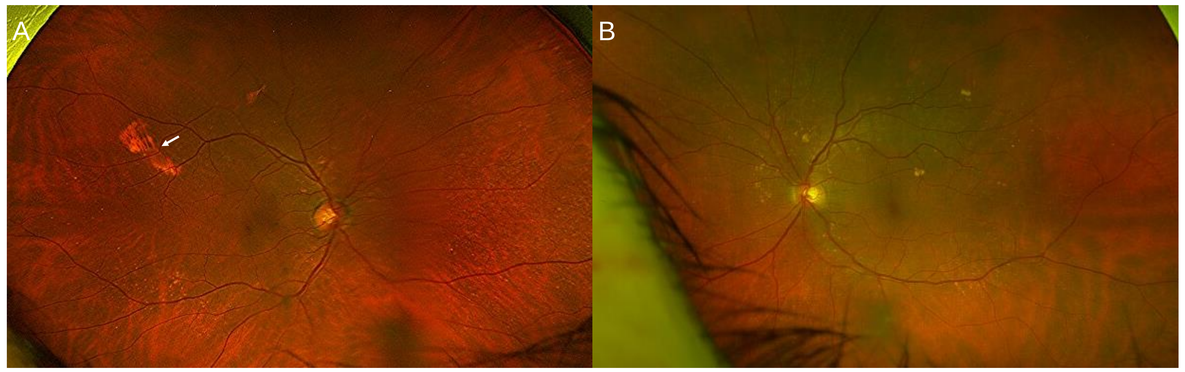

Figure 1. (A) Color fundus photography of the right eye revealing an elevated hypopigmented subretinal lesion with at the terminal bifurcation of the superotemporal arcade (white arrow). The lesion exhibits irregular borders and no evidence of fluid **(B)** Color fundus photography of the left eye revealing peripheral drusen. Fundal imaging is otherwise normal.

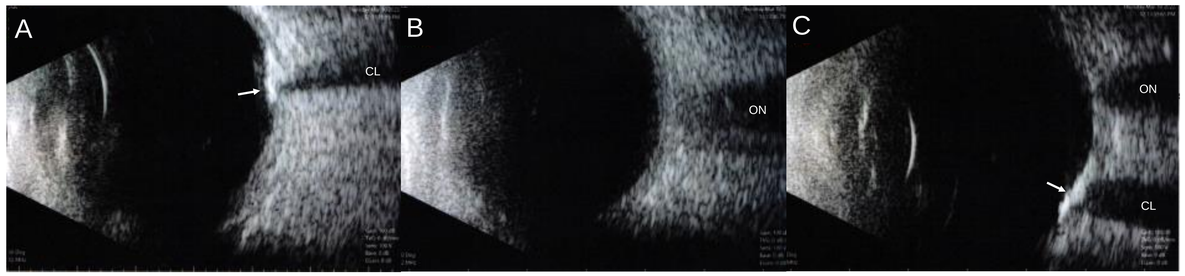

Figure 2. (A) Ophthalmic ultrasound/B-scan of the right eye revealing a hyperechoic signal/calcification (white arrow) with acoustic shadowing of the choroidal lesion (CL). **(B)** B-scan of the right eye revealing acoustic shadowing of the optic nerve (ON). **(C)** B-scan of the right eye revealing hyperechoic signal/calcification (white arrow) with acoustic shadowing of the CL and ON.

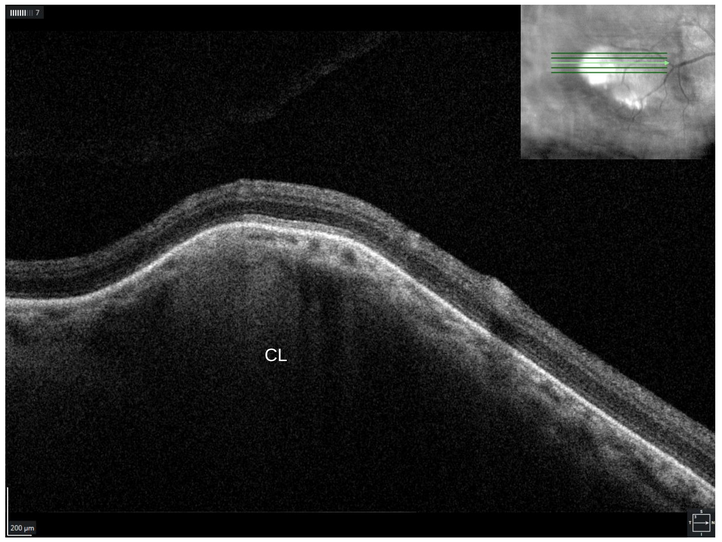

Figure 3. Optical coherence tomography 5-line raster of the right eye revealing a hill-like elevation with an intact overlying retina, representing a Type 2 "rolling" choroidal lesion (CL). No evidence of subretinal fluid.

DISCUSSION

- SCC most commonly affects elderly Caucasians. It is often asymptomatic and diagnosed incidentally.[1]
- SCC classically presents as a superotemporal yellow placoid lesion on diagnostic imaging and can be unilateral or bilateral.[1]
- Most cases of SCC are primary or idiopathic; however, secondary causes have been linked to hypercalcemia from hyperparathyroidism, parathyroid adenomas, chondrocalcinosis, vitamin D intoxication, hypomagnesemia, diuretic use, CKD, and Bartter & Gitelman syndromes.[1,2,3]
- SCC can be classified into four types based on contour on OCT:[2]
  - Type 1: "Flat"
  - Type 2: "Rolling"
  - Type 3: "Rocky-Rolling" – most common, thins overlying choroid, can involve retina pigment epithelium & outer retina
  - Type 4: "Table Mountain"
- Proper early diagnosis of SCC can minimize unnecessary testing and retinal referrals.[1]
- Visual prognosis for SCC is excellent, often with unchanged visual acuity, as lesions are typically far from macula/fovea.[3]
- SCC is self-limited and treatment is unnecessary; however, lesions should be examined annually for changes, and metabolic derangements should be corrected.

REFERENCES

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