Optic Disc Drusen (ODD)

Optic disc drusen are calcified deposits located anterior to the lamina cribrosa within the optic nerve head. They can mimic papilledema but do not represent increased intracranial pressure.

 Pathophysiology Thought to result from axonal degeneration and abnormal axoplasmic flow.

Calcify over time and become more visible with age.

Often bilateral and congenital.

More common in small crowded discs (“disc-at-risk”).

 Epidemiology Present in up to 2% of the population

Can be familial (autosomal dominant in some cases)

Often asymptomatic but may cause visual field defects

 Clinical Features Feature Description Age of onset Often detected in teens or young adults Appearance Lumpy, irregular disc with no true hyperemia; drusen may autofluoresce Laterality Usually bilateral Symptoms Often asymptomatic; some have transient visual obscurations or visual field loss Visual fields Enlarged blind spot, arcuate defects, nasal steps (similar to glaucoma) Visual acuity Usually preserved Diagnostic Tools Tool Findings OCT Elevation of optic nerve head without subretinal fluid; RNFL may show thinning B-scan ultrasound High reflectivity (hyperechoic calcifications) Fundus autofluorescence Drusen often autofluoresce CT orbit Hyperdense calcifications Fluorescein angiography No leakage (unlike true papilledema) ⚠ Differential Diagnosis True papilledema (e.g., idiopathic intracranial hypertension)

Optic neuritis

Ischemic optic neuropathy

Leber's hereditary optic neuropathy

Tumor or infiltrative optic neuropathy

 Management No specific treatment needed

Regular monitoring of visual fields

Educate patient about the benign nature

Avoid misdiagnosis as papilledema (to prevent unnecessary work-up)