

ASTEROID HYALOSIS

This is a Degenerative change in the vitreous associated with calcification.
It is Present in about 0.3% of the population and is usually unilateral.
No cause is known for this but is slightly commoner in diabetics.

PATHOLOGY

Degenerated vitreous collagen fibrils with reduced amount of hyaluronic acid
Lipid becomes attached to sulphated glycosaminoglycans
Asteroid hyalosis occurs when calcium becomes bound to the lipid (calcium soap).

CLINICAL

Asteroid hyalosis appears as visible as clouds of bright white particles which tend to obscure the fundus view.
Patients are less affected by the particles because they cause forward scatter of light i.e. scattered light from these particles is reflected forwards blurring the physician's view and not back onto the patient's retina to reduce their vision. Thus it does not usually affect one's vision.

However it can affect the quality of retinal photographs taken for diabetic screening for instance.

Do they increase in number?

In my experience they do not increase over time, though I suspect they start from having no asteroids to a phase where they increase and then plateau and stabilise. The total number do differ from Patient to patient.

No treatment is required. Only in exceptionally rare cases do they interfere with vision, in which case removal of them by an operation (Vitrectomy) is readily possible. Technically called a Vitrectomy performed by a Vitreo-retinal surgeon eg Mr Ed Schulenburg or Mr Graham Duguid at The Western Eye Hospital for west London.

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