# TWOP Discussion

## CHRISTMAS TREE CATARACT









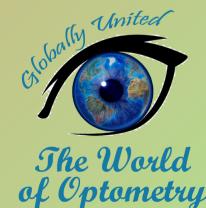


#### #TwopDiscussion INTRODUCTION

- Christmas tree cataract, is a rare agerelated condition, in which changes occurs in the crystalline lens.
- Resulting from accelerated breakdown of membrane-associated denatured proteins induced by elevated calcium levels, characterized by polychromatic needle-shaped deposits in the deep cortex and nucleus which may be associated to other opacities.
- presented unilaterally or asymmetrically bilaterally.







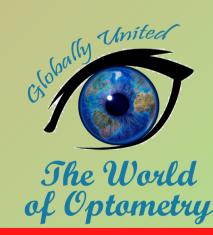


#### **#TwopDiscussion** ETIOLOGY

- There are various theories about the composition of the deposits.
- Some studies indicate they are cholesterol crystals caused by the change in cell metabolism, others believe they formed from cystine which is released when crystalline break down,
- While some believe that it is just an anomaly in the diffraction of light as it reflects off cells that have fused in the crystalline lens.

**Clear Lens** 

Lens colored by Cataract







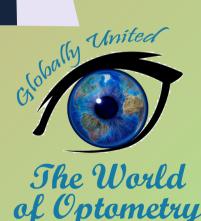
## CLINICAL FEATURES & SYMPTOMS

 Typically there are no associated pathologies with Christmas tree cataracts



- Most patients who have it are fit and well.
- In either case the opacities offers threat to visual acuity.
- They may develop a little over time, but surgery is avoided where possible as the reflective properties of the opacity impair the view of the surgeon while performing the procedure.









### DISCUSSION

- This type of change has already been the subject of several clinical discussions, and the composition of said opacities is still controversial.
- The colors vary according to the angle of incident light and the colors red and green are predominant, which explains its nomenclature.



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## DISCUSSION

- Since the brightness and variety of colors refers to the ornaments that commonly decorate the Christmas tree.
- It is frequently observed in people who suffers from Steinert's disease which is a type of myotonic dystrophy.

