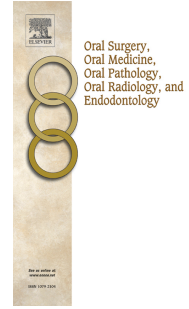


# Accepted Manuscript



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**Positive staining for cellulose in Oral Pulse Granuloma**

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**Abstract****Objective**

Oral pulse granuloma (OPG) is a rare oral inflammatory lesion characterized by the presence of hyaline rings with numerous multinucleated giant cells. The etiopathogenesis for this lesion is thus far unclear as is the composition of the hyaline rings. So, our aim was to investigate whether these hyaline rings do contain cellulose.

**Materials and Methods**

Using a newly-developed staining method for cellulose, we studied 18 histological samples diagnosed as OPG, in addition to three samples originally diagnosed as “normal” foreign body reactions. In our study, the visualization of cellulose is based on the specific binding, to cellulose, of the carbohydrate binding module (CBM) of  $\beta$ -1,4-glycanase.

**Results**

All samples diagnosed as OPG showed positivity in the cellulose staining and localized into the hyaline rings already seen in normal HE-staining. In addition, one lesion (of three), first diagnosed as foreign body reaction without the presence of hyaline rings, showed positivity for cellulose in HRP staining.

**Conclusions**

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