Epithelial loss correlated with decreased beta defensins and increased risk of candida infections in Oral Lichen Planus

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OBJECTIVE: To correlate epithelial erosion with beta defensin expression in OLP and risk for Candida infections
STUDY DESIGN: Sample biopsy tissues from 35 cases of clinical OLP vs. appropriate controls were statistically analyzed for beta-defensin expression using quantitative PCR (Q-PCR) and immunohistochemistry.

RESULTS: Beta defensins expression was correlated with epithelial integrity in OLP. Loss of epithelial cells due to erosion resulted in concomitant decrease in beta defensins and increased Candida biofilms in vitro.

CONCLUSIONS: Despite transcriptional upregulation of defensin expression in OLP; the loss of epithelial cells in erosive OLP cohorts results in concomitant decrease in defensin and higher risk of Candida infections. Pre-emptive anti-Candida therapy is advised in erosive OLP.