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RESEARCH ARTICLE

A GHOST KERATIN PEARL – AN INTERESTING FINDING!

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ABSTRACT

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**Corresponding Author:* Dr. Noopur Kulkarni Oral squamous cell carcinoma is the most common malignant epithelial neoplasm hitting the oral cavity . A variety of genomic factors are responsible for this . Early diagnosis is the key to deal with this deadly disease . This dental image is an interesting finding of presence of a ghost keratin pearl in the H & E section of OSCC

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INTRODUCTION

Keratins are diverse proteins. Subsequently it was realized that it is actually a mixture of keratins, keratin filament associated protein & other enzyme proteins .The process of maturation of keratinocytes follows keratinisation. A benign keratin pearl is surrounded by dyskeratosis. As the ultimate fate of a squamous cell is formation of keratin , the phenomenon of these cells laying down keratin in a concentric manner appear as a keratin pearl, that symbolize malignancy. A well differentiated SCC has a pale glossy cytoplasm with more squamous eddies or keratin pearls. A ghost cell is an enlarged eosinophilic epithelial cell with eosinophilic cytoplasm, but without nucleus . Pathological ghost cell formation could be a result of aberrant keratinization or coagulative necrosis. The given H & E stained field shows a histological section of a well differentiated oral squamous cell carcinoma which has all the classic features of an oral squamous cell carcinoma which is an indicative of a malignancy. The breach in the integrity of the intact epithelium is evident, along with all the dysplastic features. In the connective tissue is the presence of a mature & a very large sized keratin pearl which is huge in size & hence

the name ghost keratin pearl. It is centrally placed in the connective tissue. Adjacent to it are other keratin pearls & they are also large in size. The overall features are suggestive of a well differentiated oral squamous cell carcinoma



This is a low power view of the Histopathological section of an Oral squamous cell carcinoma . The central portion depicts a giant keratin pearl, which is surrounded by a dysplastic stroma.

REFERENCES

1)Pathophysiology of keratinization . Priya Nimish *et al* JOMFP 2018 Jan-Apr 2018

- 2)Histological variants of SCC of skin .Aug 2001
- 3)Malignant epithelial tumors of skin . Pathobiology of human disease 2014
- 4)Ghost cells -Wikipedia