Focal epithelial hyperplasia (Heck's disease, multifocal papilloma, virus epithelial hyperplasia) is a condition characterized by numerous soft, well circumscribed, flat, and sessile papules that are distributed throughout the oral mucosa. It was first described by Archard et al in 1965. Human Papilloma Virus DNA 13 and 32 are detected in majority of these lesions but some are idiopathic. The lesions may be asymptomatic and may be found by routine examination.

CASE REPORT
A 71-year-old man reported to our department with the chief complaint of burning sensation in the mouth on left side since 6 months. The first episode of burning sensation was 6 months back, continuing up to the present day. The sensation lasts for few minutes after meals, markedly whenever he eats spicy food. The patient did not give any history of ulcer, blister or white patch in the mouth.

He had the habit of chewing 5-6 betel quid (pan) daily since 10 years and 2-3 areca nuts (supari) per day since 5 years. He did not give any significant past dental, medical and family history.

On palpation, the lesion was nodulated and non-tender, with non-indurated base. The white areas were non-scrappable in nature. Based on the clinical findings the provisional diagnosis of erythroplakia was suggested.

Incisional biopsy was advised. Histopathology revealed superficial parakeratinized stratified squamous epithelium with spongiosis, moderate acanthosis, intact basement membrane. The lamina propria showed dense interlacing bundles of collagen fibers with fibroblast, fibrocytes, and moderate infiltration of chronic inflammatory cells. The deeper layer of the tissue showed fatty tissues, muscle issues and extravasated RBCs. There was no evidence of malignant changes. The overall histopathological features were suggestive was “Epithelial hyperplasia”. Under higher magnification, epithelial cells of spinous layer displayed enlarged nuclei and vacuolated clear cytoplasm suggestive of koilocytes. The above histopathological features were suggestive of ‘Heck’s disease’.

On intra-oral examination, a rhomboid-shaped, fiery-red, nodulated area was seen in left posterior buccal mucosa with irregular margins, measuring approximately 3cm × 2cm in size, extending antero-posteriorly approximately 2cm from the left labial retro-commissure upto 1cm anterior to the retromolar area, and supero-inferiorly, from the occlusal level to the lower buccal vestibule. Surrounding mucosa appeared normal. Multiple discrete white patches were seen over the erythematosus area. No secondary changes were seen.

Fig 1: The facial profile

Fig 2: Intraoral picture

Fig 3: Photomicrograph (10X)
DISCUSSION

Focal Epithelial Hyperplasia (FEH) is clinically characterized by multiple circumscribed, sessile, soft elevated nodules of the oral mucosa which sometimes form clusters. They are reddish or whitish or like the adjoining oral mucosa. FEH is described in the literature as a benign condition that heals spontaneously and therefore requires no treatment, except in some cases. Sometimes it may be misdiagnosed for some other disease. In our case we initially gave the diagnosis as Erythroplakia.

WHO defined erythroplakia as a red patch that cannot be clinically or pathologically diagnosed as any other condition. The term erythroplasia was originally used by Queyrat to describe a precancerous red colour lesion on penis. Erythroplakia is defined as a red lesion of the oral mucosa that excludes other known pathologies. The lesion comprises an eroded somewhat submerged red lesion that is frequently observed with a distinct demarcation against the normal-appearing mucosa. ¹

The prevalence rate of erythroplakia in India is 0.2%. Oral Erythroplakia is predominantly seen in the middle aged and elderly. Erythroplakias are usually smooth and velvety appearance but some are granular or nodular. Often there is a well-defined margin adjacent to mucosa of normal appearance. They may have an irregular, red granular surface interspersed with white or yellow foci, which may be described as granular erythroplakia. ² There may be numerous, small irregular foci of leukoplakia dispersed in the erythroplakic patch as was seen in our case. Proper investigation is of paramount importance. In the present study, histopathology changed the diagnosis of the lesion from Erythroplakia to Focal Epithelial Hyperplasia.

Apart from Erythroplakia, focal epithelial hyperplasia may be mimicked by other diseases. The differential diagnosis Focal Epithelial Hyperplasia should be made against condyloma acuminatum, florid oral papillomatosis, Cowden’s syndrome, Crohn’s disease, Cannon’s disease (White Sponge Nevus) or Gorlin-Goltz syndrome (Focal Dermal Hypoplasia). Reports have indicated the presence of Focal Epithelial Hyperplasia in HIV infected patients. Suppression of the immune system leaves the patient vulnerable to opportunistic infections, including HPV infections. The early detection of associated oral disease should, in many cases result in earlier diagnosis of HIV infection. ³

Current therapeutic options include surgical excision, cryosurgery, electrocoagulatory, interferon- injections, topical application of interferon or podophyllin, topical and systemic retinoids, vitamins, and diode laser removal. ⁴ In our case, surgical excision was done and patient is under our follow up.

CONCLUSION:

Few diseases may mimic an entire different disease but as an oral physician, it is a challenge to diagnose such diseases at the earliest so that necessary treatment may be provided to the patients. In our case though earlier the disease seemed to be like erythroplakia but further investigation helped us to come to the final diagnosis of focal epithelial hyperplasia.

REFERENCES: