

MAST CELLS IN ORAL LESIONS

CERTIFICATE LIBRARY DISSERTATION

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Dr. Vandana Raghunath

*Department Of Oral Pathology
S.D.M. College of Dental Sciences and Hospital
Dharwad*

Mast cell a constant component of mucosal and connective tissue of all species has been ascribed as the sentinel cell in immediate hypersensitivity reactions and other types of immunologic and inflammatory reactions (Soter and Austen, 1987).

Ehrlich (1877) introduced the name 'Mastzellen' (German, Mast = Well-fed), to describe these cells being distinguishable by the presence of metachromatic granules and which had the appearance of being overfed, that is overladen with granules; which was later replaced by the Greek generic term "Mastocyte" (Ehrlich, 1877 : Mckenna and Frame, 1985 : Cobb et al, 1976).

These cells also termed as Histaminocytes (Williams et al, 1989), have been referred to as secretory cells, that store within their granules an array of biologically potent chemical mediators of immunologic and inflammatory reactions (Tuominen et al, 1989A : Swieter et al, 1993), which are released through degranulation after the cells are injured or appropriately triggered (Miller et al, 1978 : Tuominen et al, 1989A).

The origin of mast cell is a subject with many speculations and postulations. Few authors support its origin from fibroblast precursor cells by mitotic division (mesenchymal origin) and many emphasize its origin to occur by mitotic division from lymphoid blast cells. However recent advances hold the proposal that it originates from Haematopoeitic stem cells or bone marrow cells. Migration of the immature cell after its origin, to a specific location is followed by its transformation to a mature one accompanied with a decline in its proliferative capacity. Thus uncertainty still persists as to its origin and the factors controlling its proliferation and migrations.

Mast cells have been seen to be widely distributed in skin,