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Review Articles

Human Pulmonary Mast Cells: Review

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The aim of the current work was to overview the knowledge regarding the mast cell origin, morphology, mechanisms of mast cell activation and the localization of these cells in normal lung.

In the human respiratory system, the role of mast cells has been examined in two aspects: firstly, as these cells participate into innate and adaptive immunity they are considered to be responsible for lung health, and secondly, mast cell mediators cause and modulate inflammation, and structural and functional remodeling of airways, parenchyma, and vasculature in the respiratory diseases.

The knowledge of mast cell heterogeneity in different lung compartments contributes to clarify the role of these cells in maintaining the homeostasis. Mast cells number in normal lung may be used as referent values in diagnosing lung diseases.

Key words: mast cells, lung, human