

Cellular effectors of the inflammatory response in chronic obstructive pulmonary disease (COPD) [Efectores celulares de la respuesta inflamatoria en la enfermedad pulmonar obstructiva crónica]

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Approximately 3 million people in the world die every year as a consequence of COPD, which is associated with an abnormal inflammatory response of the lung to noxious particles and gases. This inflammatory pattern causes pathological changes leading to a narrowing of small airways and destruction of lung parenchyma, also known as emphysema. Classically, these changes were associated to macrophages and neutrophils, although T CD8+ lymphocytes were latter added to the equation to explain the origin of emphysematous lesions. However, in recent years, multiple evidences have arisen indicating that inflammatory response in COPD is much more complex. These findings point to a key role for mast cells, dendritic cells, T CD4+ and B cells. The aim of this article is to review such evidence and report what is known so far about those cells involved in the inflammatory response in COPD. © 2015, Sociedad Medica de Santiago. All Rights Reserved.

Chronic obstructive

Emphysema

Immunity

Inflammation

Leukocytes

Pulmonary disease

B lymphocyte

CD4+ T lymphocyte

CD8+ T lymphocyte

chronic obstructive lung disease

dendritic cell

human

inflammation

lung alveolus macrophage

mast cell

neutrophil

pathophysiology

physiology

B-Lymphocytes

CD4-Positive T-Lymphocytes

CD8-Positive T-Lymphocytes

Dendritic Cells

Humans

Inflammation

Macrophages, Alveolar

Mast Cells

Neutrophils

Pulmonary Disease, Chronic Obstructive