Allergy-immunology glossary

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Towards a clear designation of some of the terms used in allergology and immunology.

| **Toll like receptors** (TLRs) | TLRs are a series of molecules that are expressed at the cell surface or endosomal membrane of immune cells such as monocytes, neutrophils, macrophages, dendritic cells, T cells, B cells and NK cells. They are capable of recognition of pathogen-associated molecular patterns and thus play crucial roles in immune responses against microorganisms. Intracellular TLR-mediated signaling will trigger the production of proinflammatory cytokines and upregulation of costimulatory molecules. So far, about eleven human TLRs have been identified and each of them participates in a specific intracellular signaling pathway.  

| **Respiratory burst of phagocytes** | Also called oxidative burst; refers to rapid release of reactive oxygen species in phagocytic cells; mainly macrophages and neutrophils; induced by perturbation of the plasma membrane during phagocytosis or following interaction between the cell surface and a number of environmental stimuli. The primary free radical–generating system is the phagocyte oxidase system which is assembled in activated phagocytes mainly in the phagolysosomal membrane. A disease called chronic granulomatous disease is caused by an inherited deficiency of one of the components of phagocyte oxidase, compromising the capacity of neutrophils and macrophages to kill certain species of gram-positive bacteria and fungi. |

| **Pathergy** | Hyper-reactivity of the skin that occurs in response to minimal trauma. A positive skin pathergy test is characterised by erythematous induration at the site of the needle prick with a small pustule containing sterile pus at its centre. Pathergy can also lead to ulcerations at the site of surgical incisions that may be resistant to healing. Pathergy can be seen with both Behçet's disease and pyoderma gangrenosum. |

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