Allergy-immunology glossary

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

| **Platelet activating factor (PAF)** | A phospholipid autacoid with potent effects throughout the innate immune system. It is derived from membrane phospholipids in several cell types, including mast cells and endothelial cells. PAF can cause bronchoconstriction and vascular dilatation and leak. It induces platelets and leukocytes aggregation and is involved in chemotaxis of eosinophils, neutrophils and monocytes. PAF stimulates receptors coupled to G proteins which activate phospholipases C and A2, inducing the formation of diacylglycerol, inositolphosphate and arachidonic acid (A2). It is selectively degraded by two small families of PAF acetylhydrolases (PAF-AHs). Recent studies have revealed that PAF synthesis takes place in the absence of cellular activation. |
| **PAF acetylhydrolases (PAF-AHs)** | PAF-AHs constitute a unique subfamily of phospholipases A2, specific for short acyl chains in the sn-2 position of the phospholipid. Given the existence of two pools of PAF, intra- and extracellular, the acetylhydrolases can be divided into two subclasses: those found in the cytosol and enzymes secreted to blood plasma or other body fluids. They are Ca\textsuperscript{2+}-independent. Two of the PAF-AHs are specific oxidized phospholipid phospholipases that reduce inflammation, but also remove oxidatively truncated phospholipids that induce apoptosis. Expression of plasma PAF-AH is increased by stimulation with LPS and other inflammatory agonists, and decreased by anti-inflammatory drugs and cytokines. |

REFERENCES: