

Complement Overreaction

The complement system, resembling in its enzyme cascade construction the coagulation system, is built from about 25 different serum proteins and about 10 different cell membrane proteins and is at work every day, even in the healthy person. Complement helps us for defense against infectious agents and the central component, C3 (1.3 grams/liter) is synthesized by the liver to be turned over by 50% daily. Genetic deficiencies of complement components cause different diseases - worst is C3 deficiency which, if untreated, is lethal at young age. If complement activation is something good for the body, its overreaction or its endless activation by the autantigen-antibody complexes leads to severe, sometimes acute inflammatory reaction in those organs that contain much of the reticuloendothelial system (lung, liver, spleen, bone marrow) or where the microvasculature is strongly developed (kidney, skin).

