C3 Deficiency

National Cancer Institute

Source

National Cancer Institute. C3 Deficiency. NCI Thesaurus. Code C9468.

A rare genetic disorder with an autosomal recessive pattern of inheritance. It is caused by the ineffective or decreased biosynthesis of the third complement component, C3. C3 deficiency may also be acquired acutely post-infection or chronically from co-morbid autoimmune disorders. If C3 is adequately synthesized, its rapid depletion may result in a functional deficiency. Clinical signs of the inherited deficiency present within the first decade of life and are consistent with the signs of recurrent systemic infection or immune complex disease. Deficiency of serum C3 and its major cleavage product, C3b, will decrease the effective humoral immune response to encapsulated bacteria. Deficiency of C3 also impairs clearance of circulating immune complexes and therefore predisposes to rheumatic and renal disease.