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ST VINCENT'S PATHOLOGY

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COMPLEMENT PROTEINS AND ACUTE PHASE REACTANTS INFORMATION SHEET

TEST	INDICATION	INTERPRETATION
CI ESTERASE INHIBITOR	• Angioedema	• Low levels diagnostic of hereditary form angioedema which is also associated with low C4
CH100 or TOTAL HAEMOLYTIC COMPLEMENT	• Recurrent bacterial infection • Connective tissue diseases	• Congenital deficiency will have no activity • Low level suggests complement activation (eg in SLE)
SERUM COMPLEMENT C3 C4	• Detection of complement activation in SLE, glomerulonephritis and other immune complex diseases	• Reduced C3, C4 in immune complex disease with classical complement pathway activation eg SLE • Normal C4 and reduced C3 in diseases with alternative complement pathway activation eg septicaemia, endotoxaemia • Reduced C4 and normal C3 in hereditary angioedema • Raised C3, C4 in inflammatory disease eg RA.
C-REACTIVE PROTEIN ALPHA-1 ANTITRYPSIN FIBRINOGEN	• Inflammatory disorders • Neoplastic conditions • Unexplained high ESR • Monitoring disease activity eg Rheumatoid Arthritis • Cardiovascular risk assessment	• Can indicate inflammatory response in patients with normal ESR • May distinguish acute from chronic inflammatory conditions • CRP at high end of normal range associated with increased CVS risk
HAPTOGLOBIN	• Inflammatory disorders • Haemolytic anaemia	• Elevated in inflammatory diseases • Decreased in haemolytic anaemia