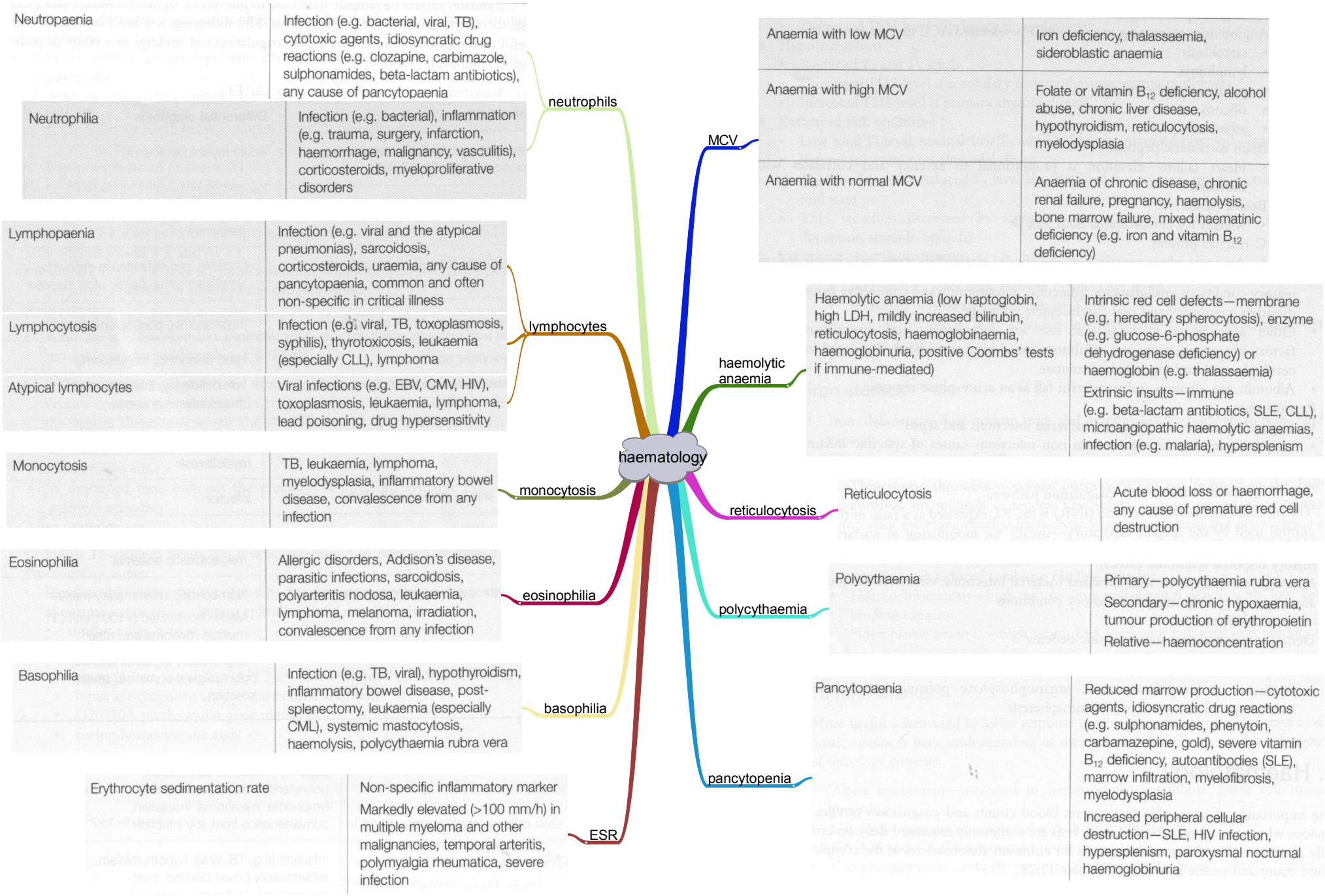
haematology
neutrophils
Neutropaenia
Infection (e.g. bacterial, viral, TB), cytotoxic agents, idiosyncratic drug reactions (e.g. clozapine, carbimazole, sulphonamides, beta-lactam antibiotics), any cause of pancytopaenia
Neutrophilia
Infection (e.g. bacterial), inflammation (e.g. trauma, surgery, infarction, haemorrhage, malignancy, vasculitis), corticosteroids, myeloproliferative disorders
lymphocytes
Lymphopaenia
Infection (e.g. viral and the atypical pneumonias), sarcoidosis, corticosteroids, uraemia, any cause of pancytopaenia, common and often non-specific in critical illness
Lymphocytosis
Infection (e.g. viral, TB, toxoplasmosis, syphilis), thyrotoxicosis, leukaemia (especially CLL), lymphoma
Atypical lymphocytes
Viral infections (e.g. EBV, CMV, HIV), toxoplasmosis, leukaemia, lymphoma, lead poisoning, drug hypersensitivity
monocytosis
Monocytosis
TB, leukaemia, lymphoma, myelodysplasia, inflammatory bowel disease, convalescence from any infection
eosinophilia
Eosinophilia
Allergic disorders, Addison's disease, parasitic infections, sarcoidosis, polyarteritis nodosa, leukaemia, lymphoma, melanoma, irradiation, convalescence from any infection
basophilia
Basophilia
Infection (e.g. TB, viral), hypothyroidism, inflammatory bowel disease, post-splenectomy, leukaemia (especially CML), systemic mastocytosis, haemolysis, polycythaemia rubra vera
ESR
Erythrocyte sedimentation rate
Non-specific inflammatory marker
Markedly elevated (>100 mm/h) in multiple myeloma and other malignancies, temporal arteritis, polymyalgia rheumatica, severe infection
MCV
Anaemia with low MCV
Iron deficiency, thalassaemia, sideroblastic anaemia
Anaemia with high MCV
Folate or vitamin B_{12} deficiency, alcohol abuse, chronic liver disease, hypothyroidism, reticulocytosis, myelodysplasia
Anaemia with normal MCV
Anaemia of chronic disease, chronic renal failure, pregnancy, haemolysis, bone marrow failure, mixed haematinic deficiency (e.g. iron and vitamin B_{12} deficiency)
haemolytic anaemia
Haemolytic anaemia (low haptoglobin, high LDH, mildly increased bilirubin, reticulocytosis, haemoglobinaemia, haemoglobinuria, positive Coombs' tests if immune-mediated)
Intrinsic red cell defects—membrane (e.g. hereditary spherocytosis), enzyme (e.g. glucose-6-phosphate dehydrogenase deficiency) or haemoglobin (e.g. thalassaemia)
Extrinsic insults—immune (e.g. beta-lactam antibiotics, SLE, CLL), microangiopathic haemolytic anaemias, infection (e.g. malaria), hypersplenism
reticulocytosis
Reticulocytosis
Acute blood loss or haemorrhage, any cause of premature red cell destruction
polycythaemia
Polycythaemia
Primary—polycythaemia rubra vera
Secondary—chronic hypoxaemia, tumour production of erythropoietin
Relative—haemoconcentration
pancytopenia
Pancytopaenia
Reduced marrow production—cytotoxic agents, idiosyncratic drug reactions (e.g. sulphonamides, phenytoin, carbamazepine, gold), severe vitamin B_{12} deficiency, autoantibodies (SLE), marrow infiltration, myelofibrosis, myelodysplasia
Increased peripheral cellular destruction—SLE, HIV infection, hypersplenism, paroxysmal nocturnal haemoglobinuria