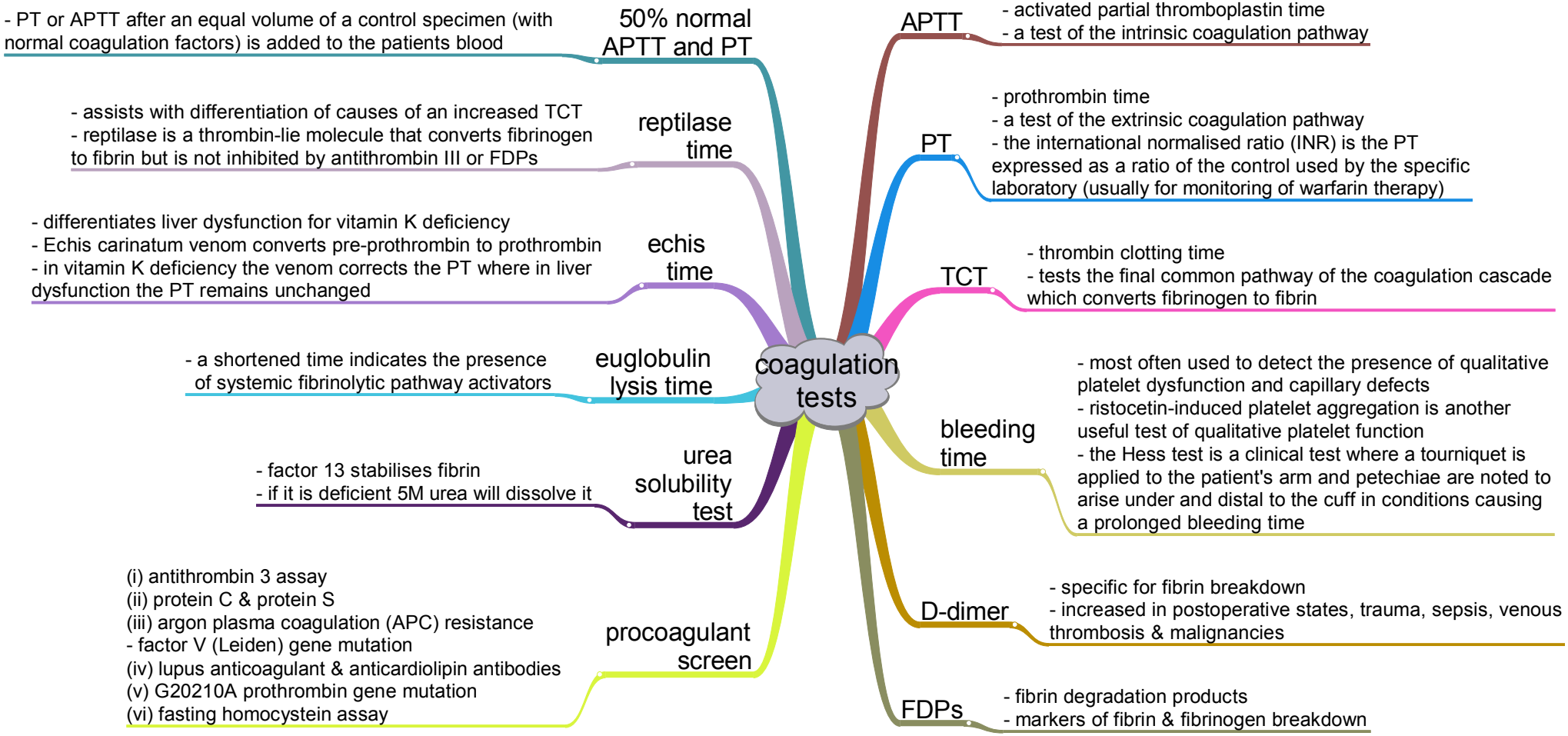
coagulation tests
50% normal APTT and PT
- PT or APTT after an equal volume of a control specimen (with normal coagulation factors) is added to the patients blood
reptilase time
- assists with differentiation of causes of an increased TCT
- reptilase is a thrombin-lie molecule that converts fibrinogen to fibrin but is not inhibited by antithrombin III or FDPs
echis time
- differentiates liver dysfunction for vitamin K deficiency
- Echis carinatum venom converts pre-prothrombin to prothrombin
- in vitamin K deficiency the venom corrects the PT where in liver dysfunction the PT remains unchanged
euglobulin lysis time
- a shortened time indicates the presence of systemic fibrinolytic pathway activators
urea solubility test
- factor 13 stabilises fibrin
- if it is deficient 5M urea will dissolve it
procoagulant screen
(i) antithrombin 3 assay
(ii) protein C & protein S
(iii) argon plasma coagulation (APC) resistance
- factor V (Leiden) gene mutation
(iv) lupus anticoagulant & anticardiolipin antibodies
(v) G20210A prothrombin gene mutation
(vi) fasting homocystein assay
APTT
- activated partial thromboplastin time
- a test of the intrinsic coagulation pathway
PT
- prothrombin time
- a test of the extrinsic coagulation pathway
- the international normalised ratio (INR) is the PT expressed as a ratio of the control used by the specific laboratory (usually for monitoring of warfarin therapy)
TCT
- thrombin clotting time
- tests the final common pathway of the coagulation cascade which converts fibrinogen to fibrin
bleeding time
- most often used to detect the presence of qualitative platelet dysfunction and capillary defects
- ristocetin-induced platelet aggregation is another useful test of qualitative platelet function
- the Hess test is a clinical test where a tourniquet is applied to the patient's arm and petechiae are noted to arise under and distal to the cuff in conditions causing a prolonged bleeding time
D-dimer
- specific for fibrin breakdown
- increased in postoperative states, trauma, sepsis, venous thrombosis & malignancies
FDPs
- fibrin degradation products
- markers of fibrin & fibrinogen breakdown