

Investigations arterial ischaemic neonatal stroke

(Level 1: to be done in any child; Level 2 and 3: in special indication)

Imaging

Level 1 testing: MR imaging and MR angiography (including neck!)

Level 2 testing: vascular sonography

Cardiac investigations

Level 1 testing: echocardiography and ECG

Laboratory investigations

Haematology:

Level 1 testing, in neonatal phase: Bloodcount* including red and white parameter, platelets

Level 2 testing: hemoglobin electrophoresis, ferritin

Infections:

Level 1 testing, in acute phase: BC*, CRP and serologies

Level 2 testing: CMV early antigen in urine, further serologies

Coagulopathies:

Level 1 testing, in acute phase: Quick/INR, aPTT*

Level 2 testing, **if thrombosis in family history**: fibrinogen, factor V (Leiden), prothrombin mutations, homocysteine, lipoprotein A, MTHFR mutation, protein C**, protein S**

Vasculitis screening:

Level 1 testing, in neonatal phase: aPTT*, anticardiolipid-antibodies

Level 2 testing: ANA, lupus anticoagulans, ANCA, C3, C4, other immunological tests

Level 2 testing mother: Quick/INR, BSR, aPTT, anticardiolipid-antibodies, ANA, LA

Level 3 testing mother: ANCA, C3, C4, other immunological tests

Metabolic screening:

Level 1 testing, in neonatal phase: lactate, ammonium, AA and OA in urine

Level 1 testing, within months: lipid profile, homocysteine

Level 2 testing: transferrin electrophoresis, carnitine profile; sulphite test in urine

On special indication: drug screening

Cerebrospinal fluid (on special indication only):

Level 1 testing: opening pressure, cells, glucose, protein, lactate, glucose ratio

Level 2 testing: further infectiological investigations

* tests indicated for more than one indication

** **Cave:** only to perform 6-12 weeks after the acute event