Investigations arterial ischaemic childhood 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, conventional angiography

Cardiac investigations

Level 1 testing: echocardiography and ECG Level 2 testing: transoesophageal echocardiography

Laboratory investigations

Haematology:

Level 1 testing: Bloodcount* including red and white parameter, platelets, ferritin Level 2 testing: electrophoresis hemoglobine

Infections:

Level 1 testing: Bloodcount*, CRP, BSR* and serology for borreliosis Level 2 testing: further serologies

Coagulopathies:

Level 1 testing, in emergency: Quick/INR, aPTT* Level 1 testing, in the course: fibrinogen, factor VIII, homocystein, lipoprotein A, factor V (Leiden) and prothrombin mutations, MTHRF mutation, protein C**, protein S**

Vasculitis screening:

Level 1 testing, during hospitalisation: BSR*, aPTT*, ANA, lupus anticoagulans, anticardiolipid-antibodies Level 2 testing: ANCA, C3, C4, other immunological testing

Metabolic screening:

Level 1 testing, within first days: lactate, ammonium, AA and OA in urine Level 1 testing, during hospitalization: lipid profile, homocystein Level 2 testing: alpha – galactosidase transferring electrophoresis, carnitine profile sulphite test in urine

On special indication: drug screening

Cerebrospinal fluid (especially in case of focal vasculopathy):

Level 1 testing: opening pressure, cells, glucose, protein, lactate, Borrelioseindex Level 2 testing: PCR Varicelles, oligoclonal AB, further infectiological investigations

* tests indicated for more than one indication

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