PASTA: Paediatric Arteriopathy Steroid Aspirin

Acute procedure for possible candidates of PASTA up to randomisation

Bold information will be asked for in the database

Suspicion of stroke → fast neuroimaging as by local protocol

consider the following sequences: **DWI/ADC; Flair, T2-weighted, TOF, SWI,** neck vessel imaging enhanced TOF or dark blood b

Preferably **3 Tesla** (if in emergency setting 1.5 Tesla, follow-up imaging on the 3 Tesla on the following days).

Imaging criteria for inclusion (will be asked for inclusion criteria):

- ✓ Newly acquired neurological deficits.
- ✓ Specific neuroimaging (MRA) features of **unilateral** stenosis or unilateral vessel irregularities within the CNS (not limited to T-junction).
- ✓ No evidence of an underlying arteriopathy of other origin than FCA-I (as MoyaMaya, arterial dissection, small vessel vasculitis).

- Proceed with local protocol for treatment as thrombectomy and/or lyses.
- Continue with local protocol for treatment → start Aspirin daily dose of 5 mg/kg BW as soon as possible after recanalization therapy as by local protocol (max 150 mg/die).
- Heparin possible in the acute phase prior to study start.
    - Consider necessity for lumbar puncture prior to antithrombotic treatment.

Checklist for inclusion/exclusion (see there)

- Possible PASTA candidate:
  Information of parents within 12-24 hours of diagnosis, when child transferred to ICU or ward (do not confront parents with decision in hyperacute situation or just ad initial information of the stroke).
  Information should reflect our equipoise of treatment with steroids – give advantages and disadvantages of both treatment arms.

- Give written information to parents.

- **Go back to parents within appropriate time and ask for consent** (steroid start the latest 48h after diagnosis and/or 96h after symptom onset).

- Go for randomisation:
  Randomisation is performed in the study secuTrial database:
    - ⇨ Create a new patient in secuTrial.
    - ⇨ Complete the "Patient informed consent and eligibility" form. Save and close.
    - ⇨ Complete the "Randomisation". Save and close.
    - ⇨ The allocated study arm will be displayed.

Start treatment with steroids (if treatment arm) immediately after randomisation

- Continue with additional risk factor evaluation as by local protocol (see also suggestions by PASTA study).

"Standard of care" Guideline for PASTA patients

- Suggested Dosage: Aspirin 5 mg/kg BW iv or po (max. 150 mg, as appropriate) for 4 weeks).
  Followed by Aspirin 3 mg/kg BW (max. 100 mg) at least till end of study (12 months).
  Exact dosage of aspirin will be asked in database.

- **ICU or ward**: decision of treating neuropaediatrician.

- Surveillance/Rehabilitation over first 3 days (suggestions).
  Clinical controls: this is the minimum which should be done, should be adjusted according to clinical problems.
  Rehabilitation: this is the fastest time table, in case of problems steps have to be delayed.
  After each step of mobilisation: check pedNIH immediately afterwards, in case of worsening: go back for one step for another 24 hours.
  day 1: Bed rest, maximum of 40 degree for sitting.
  - Consider meds to avoid tendency of obstipation till full mobilisation.

  Check swallowing before start of oral feeds.
  Full neurological examination as by PSOM.
  Every 6 hours: blood pressure, temperature, O2 saturation, **ped NIH**
  Glucose 2x/24h hours
  day 2: Bedrest, but with sitting in bed.
  Morning/midday/evening: blood pressure, temperature, O2 saturation, ped NIH.
  day 3: Start mobilisation at edge of bed/go to toilet.
  Morning/midday/evening: blood pressure, temperature, O2 saturation, ped NIH.

- Surveillance and rehabilitation for the rest of hospitalisation (length of stay is decision of treating neuropaediatrician).

- First week:
  Clinical controls: blood pressure, temperature, ped NIH twice daily.
  Mobilisation on ward in increasing time amount, no activities which increase blood pressure, heart rate etc.

- Second week and rest of hospitalisation:
  Blood pressure and ped NIH daily.
  Mobilisation according to clinical situation.

- Discharge (also if transfer to rehabilitation unit):
  Blood pressure, pulse, pedNIH and PSOM.
  Full neurological examination (as by PSOM).

Surveillance for children on steroid treatment:
Has to be adjusted to clinical problems.

Supportive treatmenwith **PPI, Ca/Vit D.**

First 3 days: **Blood pressure 4x/day, BC, glucose and electrolytes day 1 and 3**
Bodyweight as soon as mobilisation at bed edge.

For the period of tapering: **weekly urine glucose, bodyweight, blood pressure** (can be done by family physician or local paediatrician).