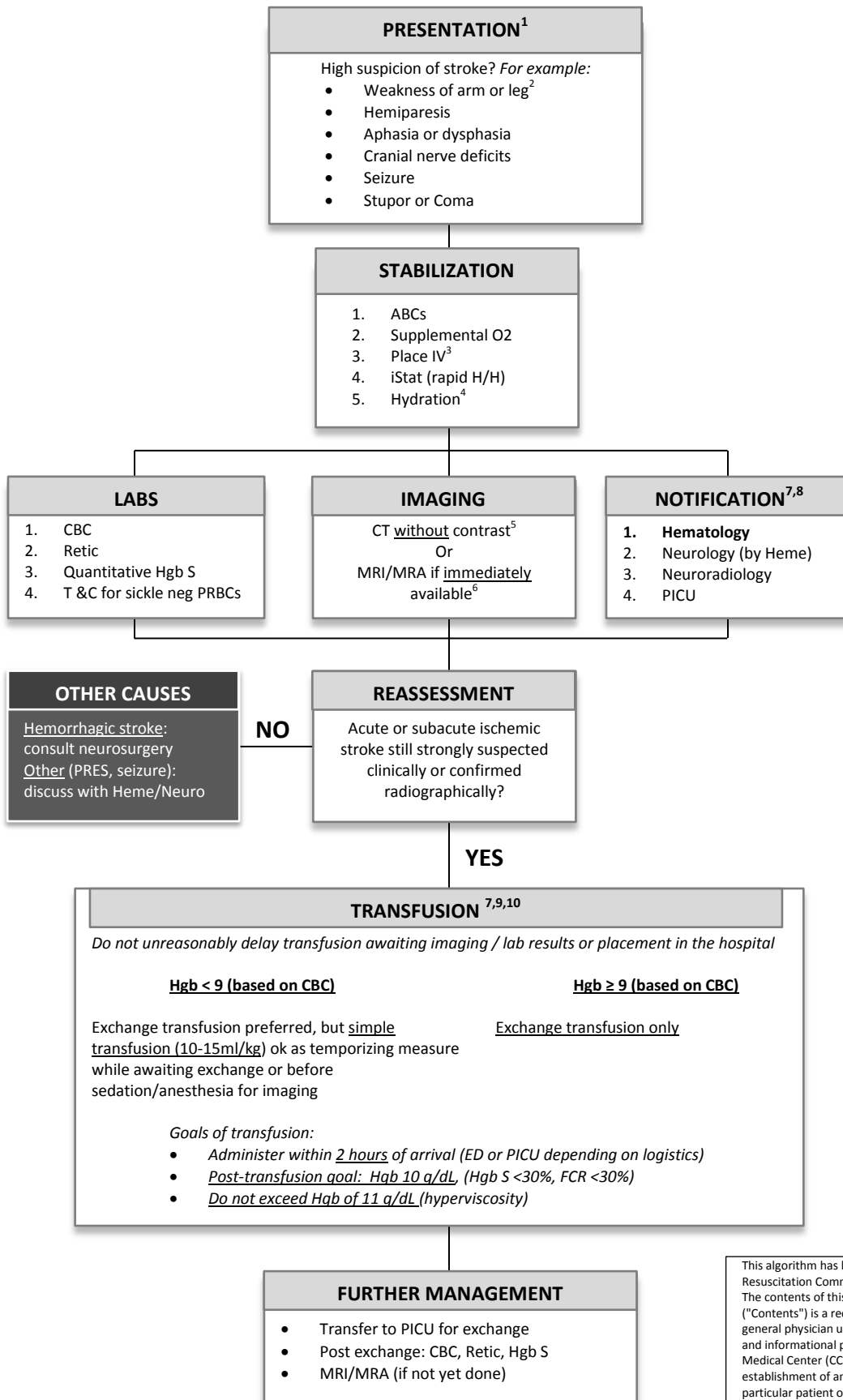


Acute Stroke in patients with sickle cell disease

OVERALL GOALS

Rapid triage and hospitalization and minimize delays to transfusion



FOOTNOTES & GUIDANCE

¹ Without prevention, clinical stroke occurs in 10% of children with sickle cell anemia in childhood. Stroke may be an isolated event or happen in conjunction with other complications of SCD, such as acute chest syndrome, aplastic crisis, or priapism

² Children with pain (VOC) may refuse to use, or protect, a painful limb. Important to differentiate from painless weakness (inability to move extremity)

³ Access: PIV preferably larger bore. Will eventually need 2 access points for exchange: 2 large bore PIVs vs. pheresis catheter (draw) and PIV / port / CVL (return)

⁴ Avoid over-hydration. Correct any dehydration then maintain with ¾ to 1 x maintenance

⁵ NO CT Angiogram: contrast can increase sickling; if eventually required, pt will need transfusion and hydration first.

⁶ If patient requires sedation / anesthesia for imaging, then transfusion (simple or exchange) should be given first

⁷ If exchange transfusion is to be performed, Heme will contact Exchange Transfusion Team (Acute Care Nephrology) to discuss and arrange

⁸ Stroke Team will NOT be involved with sickle cell patients with stroke symptoms

⁹ If patient has received chronic or recent transfusions, need for further transfusion assessed on case by case basis

¹⁰ Unlike other patients with ischemic stroke, mainstay of treatment in patients with SCD is transfusion, NOT lytic therapy (TPA)

This algorithm has been developed by Hematology, Neurology, and the Medical Resuscitation Committee (Emergency Medicine). Last revised: April 2016. The contents of this publication, including text, graphics and other materials ("Contents") is a recitation of general scientific principles, intended for broad and general physician understanding and knowledge and is offered solely for educational and informational purposes as an academic service of Cincinnati Children's Hospital Medical Center (CCHMC). The information should in no way be considered as an establishment of any type of standard of care, nor is it offering medical advice for a particular patient or as constituting medical consultation services, either formal or informal. While the Content may be consulted for guidance, it is not intended for use as a substitute for independent professional medical judgment, advice, diagnosis, or treatment.