Sickle is important to stabilize the patient to

Sicklecell disease (SCD) is a genetic condition that is inherited when a childreceives two sickle cell genes – one from each parent. Sickle cell occurs whenthe red blood cells are rigid and sickle-shaped, which causes them to sticktogether and block oxygen to the body A large number of infants are born SCD annually; today every newborn is screened for the sickle cell gene.

In this article theauthor covers the following topics pain, acute chest syndrome (ACS), infection, stroke, and available treatment options. Asstated by the author adults and children with SCD must be continuously checkedfor pain with the use of the appropriate pain scale. There are several naturalpain treatment approaches such as, acupuncture, physical therapy, massage, hydration, behavior modification, deep breathing, imagery, and distraction. Medicatedtreatment includes administration of IV fluids, opioids or nonsteroidalanti-inflammatory drugs and oxygen if hypoxia is present. AcuteChest Syndrome (ACD) is a rapid deterioration in respiratory function caused byvaso-occlusion in the vessels of the lungs. Due to severe pain and usingnarcotics as opioids, there is a potential for the decreased respiratory effort, which may lead to ACD. Patients are encouraged to use an incentive spirometerto promote deep breathing, and blowing efforts for younger ages.

ACD is themost common cause of death amongst young adults. Infectionis the most common condition that causes death in SCD patients called Streptococcuspreumoniae sepsis. Patients who experience fever should be treated as anemergency and require intervention as soon as possible, including bloodcultures, complete blood count, chest radiographs, IV fluids, and IVAntibiotics.

Oneof the great imagining tools to determine whether a child with SCD is at riskof a stroke is Transcranial Doppler, this tool is used regularly and is only tobe used for children. If the stroke is suspected it is important to stabilizethe patient to prevent further brain damage, and an exchange transfusion shouldbe performed immediately. AChemotherapeutic agent that has been shown to decrease vaso-occlusive episodesand incidence of ACS is called Hydroxyurea. Hydroxyurea therapy is one of the available paintreatments, which results in less need for blood transfusion and is not used inthe acute state. Thebone-marrow transplant is rarely used; due to high death rate fromcomplications in children who receive a bone marrow transplant. Finding a matchthrough the Bone Marrow Registry is extremely difficult. Prior to Surgeries petient needto be checked for any signs of fever, infection, dehydration, and pain, which maytrigger or cause a sickling crisis.

Those receiving blood transfussion maybe inthe risk of suffering from complications. Because SCD is a hematologicdisease, it is important to track blood loss and to watch the patient’s Hgbclosely in case he or she requires an intraoperative or postoperative bloodtransfusion. Postoperative care includes controlling pain, administeringsupplemental oxygen if needed, and maintaining fluids. The nurse shouldcontinually monitor the patient after surgery for ACS, pain crisis, andinfection. Surgical patients should be encouraged to use incentive spirometry, deep breathing, and ambulation when it is allowed.