

The Second Sickle by Ursula Curtiss - book cover, description, publication history.

Life-changing transplant gives sickle cell patient a second chance October 3, by Abe Rosenberg Sickle cell patient Cierra Danielle Jackson Cierra Danielle Jackson recalls the pain. She was 6 years old. Mom remembers an even earlier incident. I knew what it was. Instead they clump, clogging arteries and depriving vital organs of the oxygen they need. Eventually the organs fail. Very few sickle cell patients live past 30, and much of their time is spent coping with one pain emergency after another. Do you have liver problems? I managed to get back somehow, but I was in the hospital for a week. Over the past 40 years, City of Hope physicians have performed more than 14, stem cell transplants to treat leukemia , lymphoma , myeloma and other blood cancers. Finding a Match But transplants can only be successful if the right donor is found. Ideally, both donor and patient should carry the same 12 blood proteins. Relatives, especially siblings, are the likeliest source of such a match. In fact, when a child receives bone marrow from a brother or sister, the cure rate can reach 95 percent. Transplants are less successful in adults, and the odds of finding a fully matched donor outside the family are not good in the African-American community. A decade ago it was found that half-matches can work if strong chemotherapy was administered both before and after the transplant. The chemo killed the remaining sickle cells without harming the transplanted stem cells, which took root and produced healthy bone marrow. Further down the road is the possibility of using gene editing to repair defective blood cells, then reinfusing them into the patient, eliminating the need for a donor altogether. A Year of Discovery Jackson met Rosenthal in Together they decided to wait until Jackson finished college, so she could then devote the several months required for the long process of preparation, transplant and recovery. A date was set. But a bizarre snafu stopped everything. The procedure was abruptly halted. Cierra Jackson with her doctor, Joseph Rosenthal, M. They would cover the transplant through a clinical trial. The Rocky Road to Wellness This time everything fell into place. A donor from the U. To those patients Jackson sends a message, and, from deep within, a personal promise: Make sure to check your inbox from time to time for the latest City of Hope updates and breakthroughs. Please try after sometime. Sign up to receive the latest updates on City of Hope news, medical breakthroughs, and prevention tips straight to your email inbox!

Chapter 2 : The Pick, the Sickle and the Shovel - Wikipedia

To ask other readers questions about The Second Sickle, please sign up. Be the first to ask a question about The Second Sickle There's literally an escaped maniac killing people with a sickle, a tool everyone has in their garden shed in the otherwise genteel seaside Connecticut town of Seacastle.

The following are types of complications that can result from sickle cell anemia. Severe anemia Anemia is a shortage of RBCs. Sickle cells are easily broken. This breaking apart of RBCs is called chronic hemolysis. RBCs generally live for about days. Sickle cells live for a maximum of 10 to 20 days. Hand-foot syndrome Hand-foot syndrome occurs when sickle-shaped RBCs block blood vessels in the hands or feet. This causes the hands and feet to swell. It can also cause leg ulcers. Swollen hands and feet are often the first sign of sickle cell anemia in babies. Splenic sequestration Splenic sequestration is a blockage of the splenic vessels by sickle cells. It causes a sudden, painful enlargement of the spleen. The spleen may have to be removed due to complications of sickle cell disease in an operation known as a splenectomy. Some sickle cell patients will sustain enough damage to their spleen that it becomes shrunken and ceases to function at all. This is called autosplenectomy. Patients without a spleen are at higher risk for infections from bacteria such as Streptococcus, Haemophilus, and Salmonella species. Delayed growth Delayed growth often occurs in people with SCD. Children are generally shorter but regain their height by adulthood. Sexual maturation may also be delayed. Neurological complications Seizures, strokes, or even coma can result from sickle cell disease. They are caused by brain blockages. Immediate treatment should be sought. Eye problems Blindness is caused by blockages in the vessels supplying the eyes. This can damage the retina. Skin ulcers Skin ulcers in the legs can occur if small vessels there are blocked. Heart disease and chest syndrome Since SCD interferes with blood oxygen supply, it can also cause heart problems which can lead to heart attacks , heart failure , and abnormal heart rhythms. Lung disease Damage to the lungs over time related to decreased blood flow can result in high blood pressure in the lungs pulmonary hypertension and scarring of the lungs pulmonary fibrosis. These problems can occur sooner in patients who have sickle chest syndrome. Lung damage makes it more difficult for the lungs to transfer oxygen into the blood, which can result in more frequent sickle cell crises. Priapism Priapism is a lingering, painful erection that can be seen in some men with sickle cell disease. This happens when the blood vessels in the penis are blocked. It can lead to impotence if left untreated. Gallstones Gallstones are one complication not caused by a vessel blockage. Instead, they are caused by the breakdown of RBCs. A byproduct of this breakdown is bilirubin. High levels of bilirubin can lead to gallstones. These are also called pigment stones. Sickle chest syndrome Sickle chest syndrome is a severe type of sickle cell crisis. It causes severe chest pain and is associated with symptoms such as cough, fever, sputum production, shortness of breath, and low blood oxygen levels. Abnormalities observed on chest X-rays can represent either pneumonia or death of lung tissue pulmonary infarction. The long-term prognosis for patients who have had sickle chest syndrome is worse than for those who have not had it. How is sickle cell anemia diagnosed? All newborns in the United States are screened for sickle cell disease. Prebirth testing looks for the sickle cell gene in your amniotic fluid. In children and adults, one or more of the following procedures may also be used to diagnose sickle cell disease. Detailed patient history This condition often first appears as acute pain in the hands and feet. Patients may also have: Blood tests Several blood tests can be used to look for SCD: Blood counts can reveal an abnormal Hb level in the range of 6 to 8 grams per deciliter. Blood films may show RBCs that appear as irregularly contracted cells. Sickle solubility tests look for the presence of Hb S. Hb electrophoresis Hb electrophoresis is always needed to confirm the diagnosis of sickle cell disease. It measures the different types of hemoglobin in the blood. How is sickle cell anemia treated? A number of different treatments are available for SCD: Rehydration with intravenous fluids helps red blood cells return to a normal state. Treating underlying or associated infections is an important part of managing the crisis, as the stress of an infection can result in a sickle cell crisis. An infection may also result as a complication of a crisis. Blood transfusions improve transport of oxygen and nutrients as needed. Packed red cells are removed from donated blood and given to patients. Supplemental oxygen is given through a mask. It makes breathing easier and

improves oxygen levels in the blood. Pain medication is used to relieve the pain during a sickle crisis. You may need over-the-counter drugs or strong prescription pain medication like morphine. Droxia, Hydrea helps to increase production of fetal hemoglobin. It may reduce the number of blood transfusions. Immunizations can help prevent infections. Patients tend to have lower immunity. Bone marrow transplant has been used to treat sickle cell anemia. Children younger than 16 years of age who have severe complications and have a matching donor are the best candidates. Home care There are things you can do at home to help your sickle cell symptoms: Use heating pads for pain relief. Take folic acid supplements, as recommended by your doctor. Eat an adequate amount of fruits, vegetables, and whole-wheat grains. Doing so can help your body make more RBCs. Drink more water to reduce the chances of sickle cell crises. Exercise regularly and reduce stress to reduce crises, too. Contact your doctor immediately if you think you have any type of infection. Early treatment of an infection may prevent a full-blown crisis. Support groups can also help you deal with this condition. What is the long-term outlook for sickle cell disease? The prognosis of the disease varies. Some patients have frequent and painful sickle cell crises. Others only rarely have attacks. Sickle cell anemia is an inherited disease. This can help you understand possible treatments, preventive measures, and reproductive options.

Chapter 3 : The Second Sickle by Ursula Curtiss

*The Second Sickle [Ursula Reilly Curtiss, Jan Carey] on blog.quintoapp.com *FREE* shipping on qualifying offers. Book by Curtiss, Ursula Reilly.*

January 09, For decades, patients with sickle-cell disease SCD have not benefited from the novel approaches being used in malignant neoplastic conditions. Lately, however, there are hints that this seems to be changing. Data from the phase II trial using the anti-P-selectin antibody crizanlizumab for the prevention of acute vaso-occlusive pain events in SCD were presented last winter, opening the door to alternative strategies for decreasing vaso-occlusive pain events in individuals with SCD. The aim was to determine which arm best reduced the annual rate of acute pain episodes, as well as to understand the annual rate of days hospitalized, time to first and second acute pain episodes, and annual rate of other acute vaso-occlusive events including, but not limited to, priapism and acute chest syndrome. A 43 percent relative risk reduction in annual acute pain episodes. Not only did the therapy decrease the annual acute pain episode rate, but the high dose of crizanlizumab also delayed the first and second acute pain episodes when compared with placebo first episode, 4. Equally important was the absence of any increase in adverse event rates between the high-dose and placebo treatment groups. Although the SCD community is anxiously awaiting the initiation of a phase III trial, positive clinical endpoint results were highly compelling, and the conduct and completion of the trial has significantly changed patient-oriented research for SCD in two major ways. First, targeted anti-inflammatory therapy can decrease the rate of acute vaso-occlusive pain events. In this case, anti-P-selectin, an adhesion molecule that facilitates cell-to-cell interactions of red blood cells, endothelial cells, white blood cells, and platelets, may decrease the incidence rate of acute vaso-occlusive pain events. It has been known for some time that anti-inflammatory strategies may be helpful with this condition. However, the use of corticosteroids has been met with tempered enthusiasm because of the high rate of rebound acute vaso-occlusive pain events temporarily associated with their use. The results of the crizanlizumab phase II trial provide new and important evidence that targeted anti-inflammatory therapies might prove effective in decreasing the symptoms associated with the disease. A second victory was a logistical one. The trial was large 60 international sites participated, and accrual was completed rapidly, at just 18 months. The fact that any large multicenter international trial, let alone a trial for a rare disease, can be completed in 18 months is a testimony to the supporting organization, allocated resources, leadership, and the participants who agreed to volunteer for the trial. Important lessons can be learned for future SCD trials from the successful implementation and completion of this international randomized controlled trial. Of course, the enthusiasm for the new treatment must be tempered a bit because the trial did not include children, the treatment requires intravenous administration, and the durability of the therapy and long-term sequelae of treatment are unknown facts. Further, the study generalizability, and the potential cost and infrastructure required for administration of the therapy are likely limited to high-resource settings with health insurance coverage of the therapy. However, the future looks bright for targeted anti-inflammatory strategies as an alternative therapy to prevent SCD complications. A second groundbreaking SCD research discovery occurred in, namely the use of gene therapy to cure a child with severe SCD. A third development in SCD in was a U. Food and Drug Administration FDA press release describing the approval of once-a-day oral L-glutamine for prevention of acute vas-occlusive pain events. The results indicated a statistically significant decrease in acute vaso-occlusive episodes, fewer pain-associated hospitalizations and a lower incidence of acute chest syndrome. The adverse event rates were low and only 2. L-glutamine is only the second FDA-approved drug, after hydroxyurea, approved to prevent acute vaso-occlusive pain, and the first FDA-approved drug for children with SCD older than five years of age. In summary, due to landmark clinical research completed in, the SCD community should be cautiously optimistic about new treatment options with targeted anti-inflammation therapies, gene therapy for curing the disease, and a new FDA-approved drug to prevent vaso-occlusive events in children and adults. Given the nonoverlapping mechanism of action of the current FDA-approved therapies hydroxyurea and L-glutamine coupled with targeted anti-inflammatory therapies, we can envision the next generation of randomized

controlled trials in SCD, including combination therapies of these agents, in and beyond.

Chapter 4 : Sickle Cell Disease and Pregnancy

Much of Ursula Curtiss's second published crime novel, The Second Sickle (published as The Hollow House in the UK), takes place in an old house (as the English edition highlights), located in one of those moldering Massachusetts harbor towns that I always associate with HP Lovecraft's lurid shockers.

Sickle Cell Disease and Pregnancy What is sickle cell disease? Sickle cell disease is an inherited blood disorder characterized by defective hemoglobin a protein in red blood cells that carries oxygen to the tissues of the body. Sickle cell disease involves the red blood cells, or hemoglobin, and their ability to carry oxygen. Normal hemoglobin cells are smooth, round, and flexible, like the letter "O," so they can move through the vessels in our bodies easily. Sickle cell hemoglobin cells are stiff and sticky, and form into the shape of a sickle, or the letter "C," when they lose their oxygen. These sickle cells tend to cluster together, and cannot easily move through the blood vessels. The cluster causes a blockage and stops the movement of healthy, normal oxygen-carrying blood. This blockage is what causes the painful and damaging complications of sickle cell disease. Sickle cells only live for about 15 days, while normal hemoglobin can live up to days. Also, sickle cells risk being destroyed by the spleen because of their shape and stiffness. The spleen is an organ that helps filter the blood of infections and sickled cells get stuck in this filter and die. Due to the decreased number of hemoglobin cells circulating in the body, a person with sickle cell disease is chronically anemic. The spleen also suffers damage from the sickled cells blocking healthy oxygen carrying cells. Without a normal functioning spleen, these individuals are more at risk for infections. Infants and young children are at risk for life-threatening infections. What causes sickle cell disease? Sickle cell disease is inherited. It is the result of a genetic mutation that causes hemoglobin cells to be defective. This mutation is thought to have originated in areas of the world where malaria was common, since people with sickle trait do not get malaria. The sickle trait actually offers some protection from the parasite that causes malaria, which is carried by mosquitoes. Malaria is most often seen in Africa and in the Mediterranean area of Europe. Sickle cell disease primarily affects those of African descent and Hispanics of Caribbean ancestry, but the trait has also been found in those with Middle Eastern, Indian, Latin American, Native American, and Mediterranean heritage. One in twelve African-Americans has sickle cell trait. A baby will be born with sickle cell disease only if two sickle cell genes are inherited - one from the mother and one from the father. A person who has only one sickle cell gene is healthy and said to be a carrier of the disease. They may also be described as having sickle cell trait. A carrier has an increased chance to have a baby with sickle cell anemia. Once parents have had a child with sickle cell disease, there is a one in four, or 25 percent, chance with each subsequent pregnancy, for another child to be born with sickle cell disease. This means that there is a three of four, or 75 percent, chance for another child to not have sickle cell disease. There is also a 50 percent chance that a child will be born with sickle cell trait, like the parents. The birth of a child with sickle cell anemia is often a total surprise to a family, since many times there is no previous family history of sickle cell disease. Since both parents are healthy, they had no prior knowledge that they carried the gene or were at risk for passing the gene on to a child. How does pregnancy affect sickle cell disease? Some women have no change in their disease during pregnancy, while others may have worsening disease. Sickle cell crises painful events may still occur in pregnancy and may be treated with medications that are safe to use during pregnancy. Pre-existing kidney disease and congestive heart failure may worsen during pregnancy, even with proper treatment. How does sickle cell disease affect pregnancy? The risks for pregnancy depend on whether the mother has sickle cell disease or sickle cell trait. Generally, women with sickle cell trait are not at increased risk for problems, however, they may experience frequent urinary tract infections. It is also important to remember that, unlike sickle cell anemia, a woman with sickle cell trait can have iron deficient anemia while pregnant and may need iron supplementation for this reason. The ability of the blood cells to carry oxygen is especially important in pregnancy. The sickling and anemia may result in lower amounts of oxygen going to the fetus and slowed fetal growth. Because sickling affects so many organs and body systems, women with the disease are more likely to have complications in pregnancy. Complications and increased risks for the mother may include, but are not limited to, the

following: Infection, including urinary tract especially kidney and lungs Gallbladder problems including gallstones Heart enlargement and heart failure from anemia Complications and increased risks for the fetus may include, but are not limited to, the following: Miscarriage Intrauterine growth restriction poor fetal growth Preterm birth before 37 weeks of pregnancy Low birthweight less than 5. Although expectant mothers with sickle cell trait are not at higher risk for pregnancy complications, the baby may be affected if the father also carries the trait. Early and regular prenatal care is important for pregnant women with sickle cell disease. More frequent prenatal visits allow for close monitoring of the disease and of fetal well-being. General pregnancy care includes a healthy diet, prenatal vitamins, folic acid supplements a B vitamin , and preventing dehydration. Some women may benefit from blood transfusions to replace the sickled cells with fresh blood. It is important for women who receive blood transfusions to be screened for antibodies that may have been transferred in the blood and that may affect her fetus. The most common antibodies are to the blood factor Rh. Fetal testing may begin in the second trimester and include: A test that uses sound waves to measure fetal growth. This- test that combines an ultrasound with the nonstress test. This a type of ultrasound which use sound waves to measure blood flow. During labor, intravenous IV fluids are given to help prevent dehydration. Most women will receive extra oxygen through a mask during labor and a fetal heart rate monitor is often used to watch for changes in heart rate and signs of fetal distress. There are no special recommendations for the type of delivery for women with sickle cell disease and most women can deliver vaginally, unless there are other complications.

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After they and the demons agreed to cooperate, the sun god returned to the fields of the Heavenly Yard and greeted Allen in Black Box, setting him free and explaining how everyone had been pulled down to the Hellish Yard. Sickle soon after explained how he wanted Allen to restore the fallen souls, but to first review history in a new way: After Allen agreed to the task, Sickle related that Held and Michaela were awaiting him and that he should contact them once he arrived in the ground world. When Allen became embarrassed by mention of Michaela and went deep into thought, Sickle urged him to not be too absorbed in his own thoughts, pointing out how the boy usually acted when it was too late to stop something. Once the boy jumped back in Black Box and left, Sickle resumed his preparations for the following stages in the plan. Sometime after, he let Allen out in preparation for the next stages of the plan, [29] allowing the boy to return to the ground world once more. He then brought Allen to the adjacent room to meet his creator. Wanting to make Allen feel the pain he felt when he discovered the Second Period was a simulation, Sickle lied to him that Luna, who was the lone survivor aboard the Climb One, failed to make a new world and instead created an illusory one in her dreams using Black Box Type H, a virtual reality machine. As Allen countered his points by pointing out the contradictions in his logic, Sickle became increasingly flustered and revealed the deception. Sickle then left Behemo, the true Master of the Heavenly Yard, to explain the rest of the situation. As Luna suddenly disappeared and Riliane and a Black Box appeared in her place, Sickle watched as Behemo took the windup key from his back and gave it to the twins, the two opening Black Box to create a new world, the Fourth Period. Refusing to interfere in the world, he became curious about how it would develop on its own and was endlessly entertained by the capabilities of the humans that lived there. As the sun god, Sickle was able to change form at will between bat and human; as he in human form had two sickles in his possession, so too did his bat form have wings with the unique shape of scythe blades. Regardless of his form, Sickle maintained immortality and, when not restricting himself, omnipotence over the period. As a bat, Sickle was capable of flying for days without getting tired and could quickly travel across the Bolganio continent to observe anywhere in the world. Aside from his godly powers, Sickle had a talent for farming and was careful when reaping the golden rice fields of the Heavenly Yard. A close friend and a fellow god. Sickle originally trusted Levia and worked with her during the Second and Third Periods. After Levia began causing problems with her brother, he recognized the danger that they both faced and sent Held to monitor them. Sickle originally trusted Behemo and worked with him during the Second and Third Periods. After Behemo began causing problems with his sister, he recognized the danger that they both faced and sent Held to monitor them. A boy Sickle gave attention to. Due to his being an irregular, Sickle found Allen an oddity that was beyond the scope of his own creation and became fond of him despite noting his tendency to not act until it was too late. Due to his regard for him, he would often allow Allen to interfere in the world despite his own rules against doing so. He later trusted Allen enough to leave him the responsibility of recreating the world with Riliane. A woman Sickle kept an eye on. Although acknowledging that she was a friend of Held, Sickle disapproved of how Elluka broke his rule of time, enjoying an extended lifespan through unnatural means. Another woman Sickle kept an eye on. Sickle deeply disapproved of the pain and suffering Irina brought to others, considering her an incarnation of malice, and felt she deserved close surveillance. A woman whom Sickle observed. A man Sickle observed. Over the years, Sickle considered him have ultimately lost everything due to the choices he had made.

Chapter 6 : Sickle cell disease - Wikipedia

Note: Citations are based on reference standards. However, formatting rules can vary widely between applications and fields of interest or study. The specific requirements or preferences of your reviewing publisher, classroom teacher, institution or organization should be applied.

Treatment involves a number of measures. L-glutamine use was supported by the FDA starting at the age of 5 as it decreases complications. It has therefore been recommended that people with sickle cell disease living in malarial countries should receive lifelong medication for prevention. However, the frequency, severity, and duration of these crises vary tremendously. Painful crises are treated symptomatically with pain medications ; pain management requires opioid administration at regular intervals until the crisis has settled. For more severe crises, most patients require inpatient management for intravenous opioids; patient-controlled analgesia PCA devices are commonly used in this setting. Diphenhydramine is also an effective agent that doctors frequently prescribe to help control itching associated with the use of opioids. Should the pulmonary infiltrate worsen or the oxygen requirements increase, simple blood transfusion or exchange transfusion is indicated. The patient with suspected acute chest syndrome should be admitted to the hospital with worsening A-a gradient an indication for ICU admission. Hydroxyurea had previously been used as a chemotherapy agent, and there is some concern that long-term use may be harmful, but this risk has been shown to be either absent or very small and it is likely that the benefits outweigh the risks. Bone marrow transplants are the only known cure for SCD. Ideally, a close relative allogeneic would donate the bone marrow necessary for transplantation. Avascular necrosis[edit] When treating avascular necrosis of the bone in people with sickle cell disease, the aim of treatment is to reduce or stop the pain and maintain joint mobility. Increased risk of severe bacterial infections due to loss of functioning spleen tissue and comparable to the risk of infections after having the spleen removed surgically. These infections are typically caused by encapsulated organisms such as *Streptococcus pneumoniae* and *Haemophilus influenzae*. Daily penicillin prophylaxis is the most commonly used treatment during childhood, with some haematologists continuing treatment indefinitely. Patients benefit today from routine vaccination for *S. Cerebral infarction* occurs in children and cerebral haemorrhage in adults. Silent stroke is probably five times as common as symptomatic stroke. Avascular necrosis aseptic bone necrosis of the hip and other major joints may occur as a result of ischaemia. During pregnancy, intrauterine growth retardation , spontaneous abortion , and pre-eclampsia Chronic pain: Even in the absence of acute vaso-occlusive pain, many patients have unreported chronic pain. Where malaria is common, carrying a single sickle cell allele trait confers a heterozygote advantage: The parents each carry one copy of the mutated gene, but they typically do not show signs and symptoms of the condition. This happened in predominant areas of malarial cases. As of all 50 states include screening for sickle cell disease as part of their newborn screen. Since , neonatal screening of SCD has been performed at national level for all newborns defined as being "at risk" for SCD based on ethnic origin defined as those born to parents originating from sub-Saharan Africa, North Africa, the Mediterranean area South Italy, Greece and Turkey , the Arabic peninsula, the French overseas islands and the Indian subcontinent. As the number of carriers is only estimated, all newborn babies in the UK receive a routine blood test to screen for the condition. In , a law was passed requiring couples planning to get married to undergo free premarital counseling. These programs were accompanied by public education campaigns. Irons â€” , intern to the Chicago cardiologist and professor of medicine James B. Herrick â€” , in Irons saw "peculiar elongated and sickle-shaped" cells in the blood of a man named Walter Clement Noel, a year-old first-year dental student from Grenada. Noel had been admitted to the Chicago Presbyterian Hospital in December suffering from anaemia. He died of pneumonia in and is buried in the Catholic cemetery at Sauteurs in the north of Grenada. In , the introduction of haemoglobin electrophoresis allowed the discovery of particular subtypes, such as HbSC disease. Social Security[edit] Effective September 15, , the U. Social Security Administration issued a Policy Interpretation Ruling providing background information on sickle cell disease and a description of how Social Security evaluates the disease during its adjudication process for disability claims. In humans, using hydroxyurea to stimulate the production

of HbF has been known to temporarily alleviate sickle cell disease symptoms. The researchers demonstrated that this gene therapy method is a more permanent way to increase therapeutic HbF production. The clinical trials will assess the safety and initial evidence for efficacy of an autologous transplant of lentiviral vector-modified bone marrow for adults with severe sickle cell disease. Current nomenclature calls for counting the methionine as the first amino acid, resulting in the glutamic acid residue falling at position 7. Many references still refer to position 6 and both should likely be referenced for clarity.

Chapter 7 : Editions of The Second Sickle by Ursula Curtiss

The Second Sickle by Ursula Curtiss starting at \$ The Second Sickle has 2 available editions to buy at Alibris.

Chapter 8 : The Passing Tramp: Haunted Houses I: The Second Sickle (), by Ursula Curtiss

Sickle cell anemia, or sickle cell disease (SCD), is a genetic disease of the red blood cells (RBCs). Normally, RBCs are shaped like discs, which gives them the flexibility to travel through even.

Chapter 9 : The Year's Best in Sickle Cell Disease for

Sickle originally trusted Levia and worked with her during the Second and Third Periods. After Levia began causing problems with her brother, he recognized the danger that they both faced and sent Held to monitor them.