Heidi Kolesaric | 3B

**Gene Therapy Corrects Sickle Cell Disease In Laboratory Study**

ScienceDaily

December 4, 2008

 This article focuses on a research study on helping those with sickle cell disease. St. Jude Children’s Research Hospital has, in their studies shown a potential correction for the disease in that of mice. They have inserted gamma-globin in mice with sickle cell to help permanently generate red blood cells that contain fetal hemoglobin. Sickle cell is a disease in which comes about because of an defect in the gene of beta-globin, resulting in red blood cells to deform, clump & break apart. This can lead to problems such as strokes, & damage to the kidneys, live, spleen & lungs. Since bone marrow transplant is generally the only way to cure the disease, but having so little compatible donors another cure like the one St. Jude Research Hospital is finding with the mice is a step in the right direction. It was stated that, even with the success in the study with the mice, it would take a while to get past technical issues regarding the study being trialed in humans. Humans have much less rate of having gamma-globin genes inserted into cells than mice do, however, it is a step in the right direction. The hospital may in fact be closer to testing the cure in humans.

 There have been several other attempts just like this one to cure a type of disease that is nearly impossible to cure. For example, there are research facilities & hospitals on the brink of finding a cure for cancer. The only so-to-speak way of curing cancer is by going through chemo, which isn’t all that pleasant. These research facilities have found cures in that of animals, particularly small ones, such as mice as in the Sickle Cell Disease research. But, with that, also comes the difficultly of applying the research on something so small to something big, such as a human. While the cure may be evident in mice, there is no possible way to know without extreme caution whether or not it will be in humans without any harmful effects. Other issues have had the same type of success with little in the human aspect of it. Once again, however, a cure has to start somewhere.

 These types of things happen for one reason: progress. People die every day because of diseases & sicknesses that have no cure or have a cure that is nearly impossible to obtain at the state of the person & their individual needs. Researchers, trail & error many types of studies they conduct by using one of the smallest, replaceable life forms, no matter how wrong it may seem, mice breed fast & they are in fact, a very good start to finding cures. With many cases, the mice give the encouragement to those with the disease or sickness which in turns provides for the funding of research to further the findings of these diseases. There is no known way to completely prevent illnesses, only precautious that can prevent it from happening to one &/or prevent it from getting worse. In a world where no one accepts death & wishes for a cure for everything, research for cures will always be in demand & with a success as the one St. Jude Children’s Research Hospital has found, there will be a hope that hold s steady in families hearts.