Lupus paper (biology)

Science, Biology



Many people look past these rare diseases as if they are simply a myth but they are but all too real. This disease is called Systemic Lupus erythmatosus, but is called Lupus for short. An autoimmune disease such as Lupus weakens your body's immune system response. Normally, the immune system helps protect the body from harmful substances. But in patients with an autoimmune disease, the immune system can't tell the difference between harmful substances and healthy ones.

This specific autoimmune disease has a long list of effects on the human body. There currently is no cure for SLE but there are treatments for which specific symptoms you show of the disease. The causes of this disease are not truly well known. Some researchers believe that an infection with an organism that looks like certain proteins causes these autoimmune diseases, although it has not been proved. The proteins are then late mistaken for the infectious organism and then wrongly attacked by the immune system.

This has to do with the body's immune system response. Instead of having your body's immune system protecting against disease, you have an overactive immune response that cannot discriminate between harmful substances and healthy ones. The immune system response then goes on to attack health cells and tissue. This then leads to chronic inflammation. There are some cases where SLE is mild and is easily treatable or much more severe cases which lead to death.

This disease attacks a much larger amount of women then it does to men.

Nine times as many women as men are infected with this autoimmune disease. African Americans and Asians are also more likely to be infected.

The disease may occur at any time in a person's life but usually only shows

itself between 10 to 50 years of age. There also are drugs that have been known to possibly be the cause of SLE. There are many symptoms that come with Lupus.

These symptoms vary from person to person and may come and go and not stay at all times. This condition targets one organ at first and then has the potential to spread to others. Nearly all people with SLE experience joint pain and later on develop arthritis. Joints that are frequently targeted by the condition are the knees, wrists, hands, and fingers. More serious problems that are caused by Lupus include pericarditis, endocarditis, and myocarditis. There is a general assortment of symptoms related with this condition.

General symptoms include but are not limited to arthritis, fatigue, fever, general discomfort, joint pain and swelling, muscle aches, nausea and vomiting, pleural effusions (fluid in chest), pleurisy, psychosis, seizures, sensitive to sunlight, skin rash, swollen glands, abdominal pain, blood disorders such as ITP and blood clots, blood in urine, coughing up blood, fingers changing color in the cold and when pressed on, hair loss, mouth sores, nosebleed, numbness and tingling, red spots on skin, skin color is patchy, swallowing difficulty, and visual disturbances.

There are a few ways that a doctor could test to see if a patient has this condition. The doctor could use a few antibody tests such as antinuclear antibody panel, anti double strand DNA, anti-phospholipid antibodies, or antismith antibodies. The antibody test is a blood test to detect for certain antibodies that are present in most people with Lupus. The diagnosis of this disease is based on the appearance of four out of eleven typical

characteristics of the condition. The doctor will listen to your heart beat to see if a friction rub, caused by the condition, may be heard.

Neurological exams may also be taken. Blood and Urine tests are used to assess kidney function. There are a couple ways a doctor could treat Lupus but one medication in particular is used widespread for this condition. Corticosteroids are used to treat Lupus because of their ability to fix issues quicker than non steroidal drugs. Prednisone is a common steroid used for the treatment of Lupus symptoms. The Corticosteroids do greatly reduce the inflammation that Lupus causes but it has its negative side effects on the human body as well.

These steroids are the cause of weight gain, easy bruising, osteoporosis, high blood pressure, and diabetes. These risks increase with higher doses over longer periods of time. There are people that believe the side effects outweigh the actual problem that the steroids are solving are travel down the road of non steroidal drugs such as aspirin and Aleve. Any simple non steroidal anti-inflammatory drugs would do the job. These medications also have side effects that effect people with Lupus but do not appear as often as the use of steroids. These side effects are quite severe though.

Side effects of these drugs include stomach bleeding, kidney issues, and an increased risk of heart problems. The third type of medication used to treat Lupus is Antimalarial drugs. There is no proved connection between Malaria and Lupus but these medications have proved their worth in the treatment of Lupus symptoms. The most common drug prescribed for this type of medication technique is Plaguenil. The side effects of this drug are muscle

weakness and vision problems. Living with Lupus - Interview with Ashley Beaman in person at Children's Hospital in Boston.

When were you diagnosed? And can you describe what happened? - " I was diagnosed in October of 2008. For about a month the doctors thought I had lime disease and I was on multiple medications trying to control the amount of pain my joints and muscles were in. I began to have allergic reactions to the antibiotics they were treating me with and that were it for me. I ended up at Children's Hospital in Boston where I stayed for a total of eight days; six out of the eight days no one had any idea what was wrong with me.

I was presenting various symptoms of multiple diseases and nothing added up. I had been told a few times by the many teams of doctors that I should be on the television show House. At the point I wasn't sure if I should be flattered or petrified. I knew the show well. Eventually a stream of tests and a butterfly rash (across the nose and cheeks) that randomly appeared decided my diagnoses of lupus. "Describe living with lupus in your own words- "In the very beginning it was tough; they had me on a steroid called prednisone that just destroys your body.

Your muscles retain water and it becomes very painful at times, you crave foods like pregnant women, and your emotions run absolutely haywire. The first 6 months were the worst; once the disorder was under control and I was finally back to me it was like I wasn't even sick. "How did lupus change your lifestyle? - "It made daily living a little more complicated, between remembering to take the lupus medications and doctors appointments, frequent blood work and the occasional joint/ muscle pain. But it was life and I didn't look sick on the outside so I didn't worry much about it.

I was attending college to become a medical assistant and then I was going to pursue being a nurse because that's what I always wanted to do. Sure, Lupus interfered with this process but I have not lost track and I am still on the road to becoming a nurse. I knew there were people with other diseases that were fatal and well if I'd live no matter what. " Has this disorder caused any further health complications? – " Well there are multiple things that come with lupus, it attacks your body in more ways than one. Since my diagnoses in 2008 I have been in the hospital for pericarditis which was my lupus attacking my heart.

I have now developed another disorder known as TTP, which is an outcome of the lupus as well. The antibodies my body is making are attacking my blood vigorously and it was extremely life threatening. I was admitted to the hospital a couple weeks ago on the verge of kidney failure and a stroke. The scariest part was I really had no idea because I looked fine, but this was not the case. " Lupus has been thought of to be the cause of another autoimmune disease called Immune thrombocytopenic purpura. This autoimmune disease is called ITP for short.

ITP occurs once a body's immune system cells end up producing antibodies against platelets. Platelets are a part of one's blood that helps clotting by clumping together and clogging small holes in blood vessels. The antibodies attack and attach themselves to the platelets and the spleen attacks the antibodies and kills both the antibody and the platelet cell. ITP affects more women than men and is more common in children than adults. Symptoms of ITP include, but are not limited to, abnormally heavy menstrual bleeding, easy bruising, and bleeding under the skin causing petichial rashes.

Doctors run complete blood test to see how many platelets a patient has in their blood to tell if they have ITP. Treatment is often not needed in children because of how it disappears without it but some children do need the treatment. Prednisone is prescribed for adult patients with ITP. Some doctors recommend spleen removal, which has the potential to raise platelets by 50%, but most doctors like to use medication before surgery. Doctors prescribe drugs that suppress the immune system, gamma globulin injections, and Danocrine for treatment against ITP.

ITP is not another symptom of SLE, it is a potential Lupus is a tough disease to live with but it's possible to lead the life you wish to live with it. Ashley Beaman, for example, has the disease and has not changed her mind about becoming a nurse and is already on track to becoming what she wishes to be. Lupus is a treatable condition that many people around the globe are infected with. With the proper medication prescribed from the proper doctor, life can continue as it did before diagnosis of the disease.