BioSpectrum the business of Bio & Health Sciences ASIA EDITION

Now stem cells can repair damaged spinal cord!

January 20, 2015 | News | By BioSpectrum Bureau

Now stem cells can repair damaged spinal cord!

Singapore: Chinese scientists and doctors have carried out a new ground breaking spinal cord surgery in China, thus raising the hopes of millions of paralyzed people worldwide. The doctors used a collagen complex and stem cells to repair damaged human spinal cord.

Doctors in the country have begun a landmark clinical trial, using stem cells in treating spinal injuries. The first surgery was carried out on a man whose lower body was paralyzed after he met with an accident. Stem cell therapy and regeneration has been studied for long by Chinese scientists and this procedure is considered to be an advancement in spinal cord injuries and treatments worldwide.

Mr Dai Jianwu, research fellow at Institute of Genetics & Development, Chinese Academy of Sciences, said, "The patient was implanted with a complex made of mesenchymal stem cells and collagen tubes with collagen binding brain-derived neurotrophic factor (BDNF), a protein to support and encourage the growth of neurons."

"Spinal nerves are like a cable. So we have designed collagenous fibers, which can crawl along as they grow. Stem cells can produce regenerative tissue elements, so they improve the regeneration capacity of the wounded area," he explained.

Six other patients have signed up for the trial and the first surgery was completed on 16 th Jan, 2015 said a statement from the Chinese Academy of Sciences (CAS) said.