

Stem cell therapy to treat liver cirrhosis

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Singapore: A study conducted by Beike Biotechnology Company in conjunction with physicians and researchers at two Chinese hospitals, has highlighted the effectiveness of cord blood-derived stem cells in treating primary biliary cirrhosis (PBC). The study, which was published in Stem Cell Discovery, was the first of its kind. Researchers noted that additional clinical trials would be required before stem cells can become an accepted therapy for liver cirrhosis.

Professor Jin-hui Yang, director, department of hepatology, in the 2nd Affiliated Hospital of Kunming Medical College stated, "Given the severity of liver cirrhosis and its related conditions, and the limited number of options available to treat those who suffer from it, this finding represents an important, potentially significant breakthrough."

PBC is a chronic, progressive liver disease that leads eventually to fibrosis and cirrhosis of the liver. It affects 1 in 1,000 women over the age of 40. Approximately one-third of those who suffer from PBC and its related conditions do not respond well to ursodeoxycholic acid (UDCA) treatment, which is the only currently FDA-approved standard medical treatment for the condition. Many of those patients ultimately require liver transplantation.

Dr Sean Hu, chairman, Beike, said that, "With a growing body of research that demonstrates the effectiveness of cord blood-derived stem cell therapies in treating a broad range of chronic conditions, this latest study is a milestone in the continuing effort to gain broad acceptance and recognition of regenerative medicine as a mainstream treatment option. We look forward to conducting more comprehensive clinical trials to attempt to validate the positive outcomes we have already observed."

The case study reported in the Stem Cell Discovery involved a 58-year-old woman suffering from PBC who developed an incarcerated hernia and uncontrolled hydrothorax after undergoing UDCA treatment. One week after completing two stem cell transplantations with no observed adverse effects, the patient showed improvement in both liver function and in her general condition. She was released from the hospital but continued to receive twice-daily UDCA treatments. Six months after her discharge, doctors observed continued improvements in her liver function and overall condition.