

5th International Conference on

Tissue Engineering & Regenerative Medicine

September 12-14, 2016 Berlin, Germany

Adipose-derived mesenchymal stem cells for low back pain- the New Zealand experience

Peter Chapman-Smith

Regenerative Medicine, New Zealand

AMSCs have increasingly been used to successfully and safely to treat osteoarthritis in peripheral joints in the last decade worldwide. Veterinary similar experience has been documented for decades in animals. Adipose tissue has proven useful as a source of adult mesenchymal stem cells, readily available with a mini-liposuction procedure under local anaesthesia alone, and readily repeatable in future is required.

Low back pain (LBP) affects 80% of adults at some time, a very high morbidity. The public and private cost in pain and loss of quality of life (QOL) and time off work and leisure is extensive, widely accepted for this all too common disorder.

With conservative treatment most cases of LBP will resolve in 6 weeks. Surgical management can be indicated for unremitting nerve compression, only required for a small percentage of cases. AMSCs administered as stromal vascular fraction, SVF, is a new option that can be effective for chronic low back pain of multiple causation including disc disease and facet arthropathy. A single SVF treatment alone may be sufficient, deployed intravenously and concurrently into the lumbar epidural space by translaminar or transforaminal approach, or via the sacrococcygeal ligament as a simple direct caudal injection .

Methods of managing LBP with SVF therapy will be presented, and clinical case series data that is encouraging from SVF use in New Zealand. The safety of this simple noninvasive technique is revolutionary..

Biography

Peter Chapman-Smith is the founder and Director of the NZ Stem Cell Treatment Centre providing Regenerative Medicine with SVF in New Zealand. As an affiliate member of the Los Angeles based Cell Surgical Network, he contributes to their multicentre multinational safety and efficacy trial that has been running since July 2010. After graduating in Otago NZ in 1976, he was a family doctor and delivering obstetrician for 24 years, worked in anaesthesia for 10 years, and a long standing interest in sports medicine. For the last 20 years he has practised as an Appearance Medicine physician performing tumescent liposuction, skin cancer surgery, and extensively in phlebology doing nonsurgical varicose vein procedures. A registered laser practitioner, he performs regular duplex ultrasound assessment for venous procedures. He works in a private medical clinic in Northland New Zealand.

doctor@stemcell.co.nz

Notes: