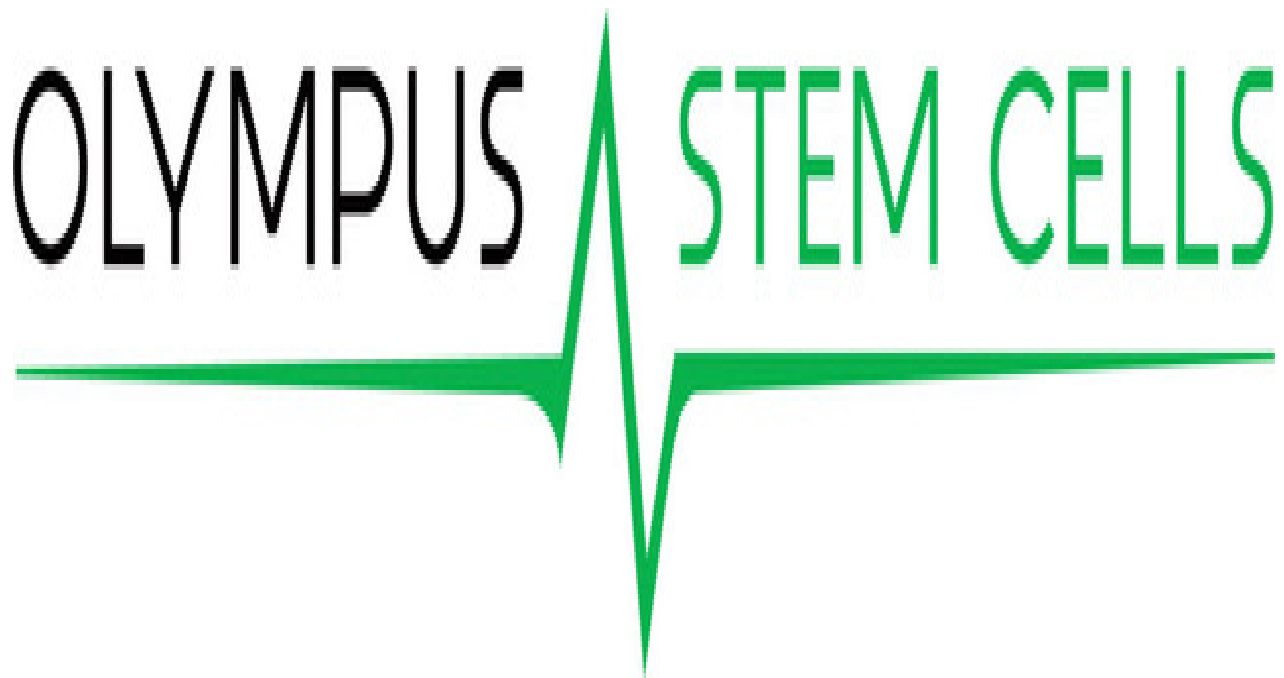




Dry Mouth from Sjogren?s Syndrome or Head and Neck Radiation: Olympus Stem Cells Advise Technical Considerations in Surgery

April 04, 2018

April 04, 2018 - PRESSADVANTAGE -

Medical clinic and research facility Olympus Stem Cells Pty Ltd, based in Sydney Olympic Park, NSW, Australia, are pleased to advise on technical considerations relating to the use of stem cells in the management of dry mouth, either from Sjogren?s Syndrome or Radiation induced xerostomia following radiation therapy in head and neck cancer treatment.

More details can be obtained from <http://www.olympusstemcells.com.au>.

The Director of Olympus Stem Cells, Professor Russell Vickers, has advised that Mesenchymal adipose stem cells, sourced from the abdomen and injected into the patients remaining salivary glands may stimulate new exocrine cells to produce saliva and replenish diminished salivary production as seen in the aging process, autoimmune conditions such as Sjogrens Syndrome or post radiation cancer treatment.

It is mandatory to undertake a resting and stimulated salivary test pre operatively to document saliva production. Quantification of salivary production is done prior to and following treatment.

The abdominal fat is harvested via mini liposuction under local anaesthesia. Approximately 20-50cc of fat is sourced. This fat is then processed through filtration and stem cells harvested. The stem cells are confirmed for viability and numbers. Stromal vascular fraction is also collected and filtrated into syringes with accompanying stem cells.

The salivary glands are noted anatomically to be in the neck and face. Specifically the glands that are targeted include remaining parotid glands, submandibular glands and sublingual glands. It is our opinion the minor salivary glands in the oral cavity proper are not needed to be targeted. Parotid glands chiefly supply serous supply of saliva, sublingual mucous supply and the submandibular glands a combination of both. In respect of the parotid glands they lie chiefly lateral to the masseter muscle. A component (deep lobe) may lie at the posterior aspect or deep to the mandible. The submandibular glands lie in Level 2 zone of the neck, just under the mandible and close to the angle of the jaw. The sublingual glands are found lying in the floor of the mouth and anatomically are situated lateral to the submandibular ducts.

Injection of stromal vascular fraction and stem cells is then very much predicated on the type of surgery and extent of radiotherapy in patients presenting for treatment following head and neck cancer surgery. Most patients will have had an ipsilateral neck dissection with removal of submandibular glands. Some patients may have had bilateral removal of submandibular glands. Some patients may have had post operative radiotherapy. In patients with Sjogrens their glands are present but atrophic and non-functioning.

Procedurally on the operating table an outline of the gland should be marked with a surgical pen. 0.25-0.5cc local anaesthetic of 2% lignocaine with or without adrenalin or similar should be injected into the skin and general area of the gland. 3 syringes with 0.25ccs-0.5cc of stromal vascular fraction and stem cells should be injected into the area of the gland under continuous slow pressure. The gland can be serially perforated if the 3 syringes are injected approximately 1cm from each other going from superior to inferior. In this way the operator can deliver the stem cells and stromal vascular fraction to the gland. The use of 28-30 gauge needles on the syringe are useful to deliver the stem cells and minimise local bleeding.

Facial and neck checks for swelling and pain are undertaken on a 15 minute basis for the first hour. Thereafter the patient should be instructed to seek urgent medical review if any further swelling or compromise is evident in the following 24 hours.

As diminished salivary production is a sign of disease or aging it is noted that the patient may require more than 1 procedure during their life time. Generally the patient is reviewed on a 6 monthly basis and may require a second procedure at 12 or 24 months.

Summary:

- Treatment for dry mouth is carried through from day surgery to 12 months
- An unstimulated and stimulated salivary test is required before surgery
- All glands can be treated individually or simultaneously
- The stem cells are harvested under aseptic conditions from one's own body (autogenous)
- The fat is sourced from the abdominal wall under local anaesthesia

Professor Vickers is an acknowledged world authority in the use of stem cells to treat neuropathic pain and has written book chapters, presented at international conferences and edited research articles on distressing facial pain. He has now introduced the concept of stem cells for dry eyes and dry mouth to replace lost tear glands and salivary glands.

Professor Vickers sources the abdominal fat for adipose derived stem cells. He processes the fat and obtains stem cell concentrations that are extremely generous in numbers and quality. As a consultant surgeon he then delivers the stem cells to the anatomical area requiring the specific treatment.

Professor Vickers uses the Merck Millipore MUSE Cell Analyser to ascertain and confirm Stem Cell viability. The surgery is conducted as a day patient.

Olympus Stem Cells treats dry eyes (keratoconjunctivitis sicca), neuropathic facial pain, dry mouth (xerostomia) and empty nose syndrome. Professor Vickers is pleased to offer stem cell services including consultations and treatment amongst the 5 medical centres in Sydney Australia. Professor Russell Vickers, has published extensively on the use of stem cells in neuropathic facial pain, stem cell protocols and is a leader in his field. He is conducting clinical treatment of MS patients with the clinical symptoms of facial pain and has expanded this to patients with Empty Nose Syndrome, a complex painful disorder that is especially distressing to patients. Empty Nose Syndrome may follow sinus surgery, septoplasty or other ENT procedures involving the nasal complex.

Professor Vickers utilises a vast array of medical scientific equipment in his quest to offer the very best of stem cell treatment. For validation he uses the Muse Cell Analyser and can achieve 100% of stem cell viability depending on the case. Additionally Olympus Stem Cells Pty Ltd has the availability of its own Mass Spectrometer and cell counting technology. In many conditions Stem Cell Therapy is a highly effective means

of alleviating pain and discomfort for people suffering a variety of conditions ranging from facial pain symptoms of MS to neuropathic facial pain. Associate Professor Vickers has published in peer reviewed journals the efficacy of his treatment.

Olympus Stem cells are proud to be one of Sydney's best Stem Cell Therapy providers, with a proven track record of providing safe, effective treatment and expert care for their patients. Olympus has a strong focus on research and development and is working hard to constantly further the advancement of stem cell techniques around the world. Their research has been published internationally in peer-reviewed medical and science journals, plus their laboratory boasts some of the best state-of-the-art biotechnology equipment in Australia.

Olympus Stem Cells Pty Ltd is one of the few companies undertaking ground breaking stem cell treatment in Australia and the Asia-Pacific region. We believe we are the only Stem Cell clinic in the Asia Pacific region offering stem cells for dry mouth and this relates to Professor Vickers standing as both a scientist and as a surgeon.

More information on the Olympus clinics and the work that they do can be obtained at <http://www.olympushealthgroup.com.au>.

Professor Vickers' recent research publications pertaining to genetics, stem cells and facial pain are extensive. These publications include Human Brain Mapping, the Australian Endodontic Journal, Hair Therapy and Transplantation, The Journal of Neuroscience, Diagnosing Dental and Orofacial Pain, the Journal of the Australian Society of Cosmetic Chemists, Medicine Today (The Journal of the Royal Australian College of General Practitioners), the Open Journal of Dentistry and Oral Medicine, and the Journal of Pain Research. More information on Professor Vickers' work can be obtained at <http://www.clinicalstemcells.com>.

Contact Olympus Stem Cells Pty Ltd:

Professor Russell Vickers

+61 4277 11 888

director@clinicalstemcells.com

Olympus Stem Cell Centre, Sydney Olympic Park, 5 Australia Avenue, Sydney Olympic Park, NSW, Australia
###

For more information about Olympus Stem Cells Pty Ltd, contact the company here: Olympus Stem Cells Pty Ltd Professor Russell Vickers +61 4277 11 888 director@clinicalstemcells.com Olympus Stem Cell Centre, Sydney Olympic Park, 5 Australia Avenue, Sydney Olympic Park, NSW, Australia.

Olympus Stem Cells Pty Ltd

Olympus Stem Cells Pty Ltd are a clinical research and development biotech company engaged in stem cell therapy in Sydney, Australia.

Website: <http://www.olympusstemcells.com.au>

Email: director@clinicalstemcells.com

Phone: +61 4277 11 888

Powered by PressAdvantage.com