

## **MUSCLE-DERIVED STEM CELL INJECTION THERAPY FOR INCONTINENCE SHOWS PROMISE FOR IMPROVED QUALITY OF LIFE**

Toronto, ON (April 28, 2009, 2:30 P.M. EST) – Cellular injection therapy using cells derived from a woman’s own muscles shows promise as a treatment for stress urinary incontinence, says Dr. Lesley Carr, first author, urologist, Sunnybrook Health Sciences Centre. Dr. Carr and colleagues from the University of Calgary, along with co-investigator Dr. Michael Chancellor, William Beaumont Hospital, Michigan, commented on their findings from a follow-up study (abstract # 1526) specially selected for media presentation at the American Urological Association 2009 Annual Meeting.

Stress urinary incontinence is a weakening of the pelvic floor muscles that leads to distressing and involuntary loss of urine during activities such as walking, running or coughing which put pressure on the abdominal muscles.

“We have seen in so many, the loss of activity and distress from this condition which deeply reduces quality of life, and we continue to validate muscle cell injection therapy as a safe, effective, less invasive treatment method to help many individuals regain the ease of simple, daily activities,” says Dr. Carr, lead investigator for the Canadian study.

Standard treatments for stress urinary incontinence include exercises to strengthen the pelvic floor muscles, use of bulking agents such as bovine collagen and surgery. Bulking agents have not proven to be durable. Surgery often involves the implant of a permanent synthetic mesh and the procedure requires time off work with reduced activity during recovery.

“The use of a woman’s own muscle cells to restore urethral muscle function using a local anaesthetic injection technique offers an attractive potential new management option for the future as it may be more durable and avoids the use of foreign material, and reduces recovery time,” says Dr. Carr.

Vania de Souza, a study participant, was diagnosed with stress urinary incontinence at age 44. “I had to restrain my life. I had to limit things... and myself,” she says. “I was so afraid that I would not drink for three hours before leaving the house, and I would not go out for more than an hour at a time.” Vania, like many patients in the study, is responding well to treatment with minimal side effects.

Preliminary results indicated 68 per cent of participants reporting improved quality of life and, 61 per cent of participants reporting improved symptoms or reduced urinary leakage, three months after the first injection of this two-phase trial. Three months after the second injection, 67 per cent of participants reported improved quality of life, and 67 per cent reported improved symptoms.

The study conducted at sites in Canada, at Sunnybrook Health Sciences Centre by urologists there including Dr. Sender Herschorn, and Calgary at the University of Calgary by Foothills Medical Centre urogynecologists Drs. Megali Robert, Magnus Murphy and Colin Burch, followed 29 women, average age 49.5 years, who had no improvement with standard therapy within a year. Twenty-five of the 29 participants opted for a second injection, and quality of life and symptoms were measured respectively by IIQ-7 and UDI-6 questionnaires.