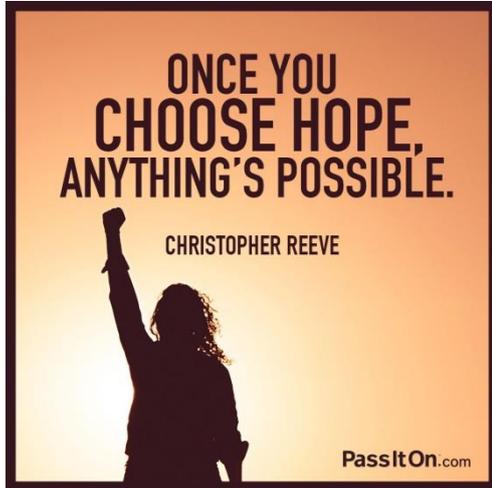


SASCA Newsletter

SOUTHERN AFRICAN SPINAL
CORD ASSOCIATION



Research: Reason for HOPE

Dear SASCA member

We are excited to start up the SASCA newsletter again.

Our vision is for the newsletter is to be a way to share knowledge between all professions involved in the rehabilitation of patients with Spinal Cord Afflictions in order to provide our clients with better care.

Newsletters will be sent out quarterly at this time. We encourage you to submit any articles, valuable information or feedback for inclusion in future issues to:

robbytaylor0805@gmail.com or stacey.munch@gmail.com

Interested in being a part of Spinal Cord Injury research world wide?

Sign up for the Wings For Life World Run:

Date: 5 May 2019, 13h00

Venue: Pretoria

For more information and to sign up, visit

www.wingsforlifeworldrun.com

Cost: R175, all funds go towards SCI research



From the Team

Research in Medicine and Spinal Cord Afflictions

This edition of the SASCA Newsletter is centred around the topic of research. Research and evidenced based practice play an essential role in the field of Health Sciences as a whole and management of Spinal Cord Afflictions (SCA's) in particular.

We have included articles describing current medical advances in SCA's, such as nerve and tendon transplants, stories of inspiration for a cure and hope for a possible cure that has been found for individuals with HIV.

Until around the time of World War II, people who sustained an injury to the spinal cord were shown to have an extremely low chance of survival. It is due to research and medical advances from the past (such as, the discovery of penicillin, advances in surgical and conservative management - including research regarding infection control principles and sterile procedures - and advances in radiology and imaging) that people sustaining a SCA's today have a greatly improved rate of survival. Furthermore, more recent research has also led us to consider, the holistic management of a person with a SCA, such as home and community re-integration, psychological adjustment, vocational issues and sexual health issues to name a few. This has guided the way forward not only for improved life expectancy but also for improved quality of life.

Research is ongoing in order to find new and improved adaptations, assistive devices, pharmaceuticals and of course, we still hold out hope for a cure.

We hope this edition of our Newsletter will serve to inspire hope for a cure as well as inspiring continuing contributions to SCA research.

READ ABOUT ADVANCES IN RESEARCH:

- The possibility of a second person cured of HIV inspires hope.
<https://penntoday.upenn.edu/news/second-patient-free-hiv-whats-next>

- Advances in SCI:

Spinal Cord Injury - Past, Present and Future

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2031949/>

Time is spine: a review of translational advances in spinal cord injury

<https://thejns.org/spine/view/journals/j-neurosurg-spine/30/1/article-p1.xml>



COURSES:

- ✓ Free ethics online courses:
<https://www.denovomedi.ca.com/profile/>
- ✓ ISCoS e-learning: Gain CPD points for completing the PT MOOC (15 CEU's) or ISCoS e-learning (up to max 30 CEU's, 3 CEU's per completed module): email Nina.strydom@lifehealthcare.co.za

From Our Community

Progress in Tendon and Nerve Transfers in Quadriplegic Patients: A Case Study from Mediclinic Muelmed, Pretoria

Written by Melanie Harding

At the Spinal unit at Muelmed we have had an upper limb clinic for patients presenting with tetraplegia since early 2011.

In this unit, we started doing tendon transfers to improve the upper limb function in our tetraplegic patients and, now in the last few years, have also started with nerve transfers.

Upper limb function in a tetraplegic patient can make the difference between functional independence and dependency. Nerve transfers, which can be done within the first 6-12 months post spinal cord injury, are a new technique that is being used in spinal rehabilitation. A brief case study will be presented of a C6 tetraplegic patient from our unit where nerve transfers, and later tendon transfers, were performed in his upper limbs. These procedures were performed to improve upper limb function in the patient.

Methods: Branches of the axillary nerve were transplanted to the radial nerve where it innervates the tricep muscle and Supinator nerve to the posterior interosseous nerve. The procedures were done on both arms, a week apart. The patient was discharged home and returned weekly for rehabilitation for a period of 10 weeks thereafter and continued with a home program at home. Both triceps action and finger extension were re-established in this patient following the nerve transfer. Thereafter, in 2017, tendon transfers were performed to restore mass grasp and pinch grip in the left hand. The flexor pollicis longus tendon was split and an interphalangeal arthrodesis of the thumb performed to stabilise the thumb. Thereafter a transfer of brachioradialis to flexor pollicis longus and the transfer of extensor carpi radialis longus to flexor digitorum profundus were performed. The limb was immobilised for 3 weeks and rehabilitation followed. Pre-operative education was done, and visualisation taught to the patient. Care giver training was done for to make the post-operative time easier.

Results: The functional outcomes at 13 months after the nerve transfer: Pre-operative muscle strength 0/5 and current muscle strength 3/5 this showed significant improvement (grade 3/5 were restored in both tricep and finger extensors). Thereafter, the tendon transfers performed, produced a pinch grip and mass grasp in the left hand and the patient is using his arms functionally at work.

Conclusion: Nerve and tendon transfers can improve upper limb function in tetraplegic patients which will reduce burden of care, improve functional independence and reduce possible future complications in this population.



Triceps action post
nerve transfer

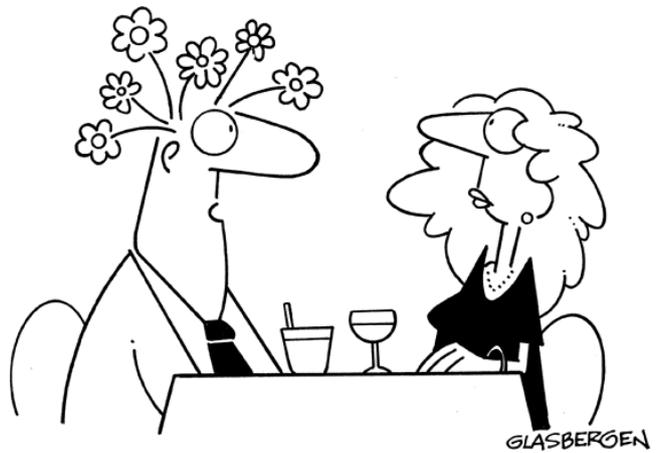
Finger flexion post
tendon transfer

Finger extension
post nerve transfer

On the Lighter Side



"Our research is solidified,
but our funding has vaporized."



"My company is developing a baldness cure using stem cells."

[https://www.iflscience.com/editors-
blog/heres-a-list-of-the-darkest-strangest-
scientific-paper-titles-of-all-time/](https://www.iflscience.com/editors-blog/heres-a-list-of-the-darkest-strangest-scientific-paper-titles-of-all-time/)

Read Robin Andrew's List of "The Darkest,
Strangest Scientific Paper Titles of All
Time"



"Do you want the pill, the suppository,
the patch or the app?"