

CONCUSSION BASELINE TESTING

Dear Parents

As you may be aware, concussion injuries may be sustained in any contact or collision sport, and are being recognised more readily. The increased awareness is due to the enhanced focus on player welfare, driven by organisations such as World Rugby and the South African Rugby Union. Children's brains are more vulnerable to concussion and take longer to recover than adult brains. Schools need to recognise the importance of managing concussion appropriately, in order to optimise a learner's return to full academics, sport and to minimise possible long-term effects. For those parents who are concerned about the sudden 'increase' in number of concussions, another way to look at it would be – how concerned should we be about the number of concussions that have been traditionally missed and remained undiagnosed?

IS CONCUSSION BASELINE SCREENING IMPORTANT?

Concussions need to be diagnosed and managed by doctors who are experienced in dealing with these injuries. Concussion is a functional brain injury – parts of the brain do not function optimally. If one were to do a brain scan such as a CT, nothing untoward would be seen as the injury is on a microscopic level.

There are set guidelines with respect to returning to sport after a concussive injury, which are in line with best practice. Certain sport federations have their own guidelines, such as World Rugby (and thereby SA Rugby). Although rugby is mentioned here, learners may sustain a concussion in any contact or collision sport - we see many concussions from hockey, soccer and even skateboarding / surfing / cycling. Part of the rehabilitation for concussion may include a "Return to Learn", where the learner's academic schedule needs to be managed. Symptoms may include physical symptoms such as headaches, nausea and fatigue, or cognitive / brain symptoms such as poor concentration / memory etc. We know from studies that the brain symptoms often take a few more days to recover than the physical symptoms.

The only way we currently have to objectively measure brain function is by doing a computerised neuro-cognitive test (NCT) – to see how well the brain is functioning in specific areas e.g. reaction time and brain 'efficiency'. These tests are more useful if we have the learner's baseline as a comparison. If a learner sustains a concussive injury, a post-injury test may be done, (and compared to the baseline) ONCE the learner says their symptoms have resolved, BEFORE they progress in their graded return to play. It is not a diagnostic test i.e. one cannot use the test to determine whether your child has a concussion or not. It is however possible to use it within 72 hours of a concussion to predict whether the recovery will be delayed (i.e. more than 3 weeks). We use a baseline NCT called ImPACT: it can be done on laptops / desktop computers from age 12 and upwards, and on Ipads for children age 11 and younger).

BASELINE TESTING AND CONCUSSION MANAGEMENT

Baseline testing is offered through Cape Sports Medicine, as is a comprehensive concussion management programme. The baseline testing provides a baseline of cognitive ability (brain function) for the year. As we expect your child's academic abilities to improve in an age-appropriate manner, it is useful to repeat this test on an annual basis.

In the event of a suspected concussion, our doctors at Cape Sports Medicine are experienced and equipped to assess and manage your child, as well as liaise with the school to facilitate a graded "Return to Learn and Return to Sport", if required. Ideally, your school should have a Concussion register to help facilitate this process; it also helps liaison between the sports and academic departments.

The computerised test is one of the tools that we use in deciding whether / when your child is ready to return to sport, once he/she reports that they no longer have any symptoms. They need to achieve a result which is at least equal to their baseline score. The reason for this timing is that we know that the brain takes longer to recover in children and adolescents, and that this recovery may still be happening once their physical symptoms appear to have resolved.

BOOKING THE BASELINE TEST

The test can be done either individually in the practice at Cape Sports Medicine (Sports Science Institute, Newlands) or we can arrange group testing through the school on pre-determined testing days. Please note that the Paediatric tests on the iPads need to be individually administered.

- Cost for the test is R100.00 per baseline test.
- Consultations for concussion management at Cape Sports Medicine will be for the parents' account and payable on the day of appointment.
- Post-injury tests are priced at R400.00 per test.

To arrange baseline testing for your child at the practice, please call Cape Sports Medicine on 021 659 5644 or email info@cape-sportsmed.com.

For interest in arranging group testing at your school, please contact your school concussion liaison officer.