



INSIGHTS

JUNE 2011
ISSUED QUARTERLY

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At the 'head' of the game

The death in February of Bobby Kuntz, a local business leader and former professional football player, saddened people across Canada. Kuntz, a Canadian Football League star from 1956 to 1967, suffered from Parkinson's disease during the latter years of his life.

His family has done something that is incredibly thoughtful and generous - they have donated Kuntz's brain to a research project at the Toronto General Hospital in the hope it will help doctors to better understand the possible link between his illness and the concussions he sustained playing football.

Such research could have enormous value. It could provide new information that influences decisions about both headgear and the rules of contact sports. Anecdotal evidence suggests that football may have taken a toll on Kuntz that he and his fellow players were unaware of while they were playing.

Two weeks after Mr. Kuntz's death, former Chicago Bears safety Dave Duerson committed suicide. His family agreed to donate his brain for research into chronic traumatic encephalopathy, a condition linked to athletes who have sustained repeated concussions. Chronic traumatic encephalopathy is associated with cognitive and behavioral problems later in life and eventually causes dementia. Also known as punch-drunk syndrome, it has been most common in boxers. In recent years, CTE has been shown to exist in other athletes, including professional and college football players and a pro hockey player, Bob Probert. The definitive mark of chronic traumatic encephalopathy disease are chunks of abnormal tau protein deposited in the brain, a finding that can only be made after the brain has been sliced, stained, and then studied under a microscope.

Concussions are not exclusive to athletes. Some of us have had our "bell rung" at least once in our lifetime. At the time, if someone showed us three fingers, and you said two, that was good enough to continue on. It shouldn't be any longer.

The decision by Kuntz's family is timely. It comes amid unprecedented concern over the dangers concussions pose to athletes playing sports such as basketball, football and hockey. Children and youth who play contact sports are



suffering concussions - a jarring of the brain that can lead to dizziness, blurred vision, confusion and loss of consciousness - sparking worries over their future health. Sidney Crosby, one of hockey's great stars, has not played a game since January 5th. The hockey team Crosby plays for, the Pittsburgh Penguins, want Crosby to be free of any symptoms before letting him play again. That may be progress by National Hockey League standards, but is that good enough, knowing that another concussion could very well end his career or affect his long term health?

Crosby has acknowledged that his injury has changed his perception of concussions, making him more aware of the damage they may cause. "You kind of gain a perspective on things and realize how serious and tough it is," he said. "It's not like a bruise or playing through something. It's a lot more serious than that."

Indeed it is. Any kind of head injury is potentially serious. To some extent, all professional athletes participating in contact sports accept a degree of risk when they go into an arena or a sports field. Yet sports organizations and athletes have to consider what level of risk is reasonable and what rule changes would reduce the risk of injury.

Mario Lemieux, co-owner of the Penguins, insists the National Hockey League should do more. Commenting after a fight-filled game, Lemieux said, "We, as a league, must do a better job of protecting the integrity of the game and the safety of our players."

Lemieux is right. Safety has to be given a higher priority in sports, and so, more must be done to prevent head injuries. Concussions, and the way they are managed, have sparked intense debate. There may very well be a relationship between concussions and trauma to the head and brain disease. Until the day comes when scientific proof provides the answers it is only reasonable that we do all that we can to protect players, and make sports safer.

To their credit, the families of Bobby Kuntz, Bob Probert and Dave Duerson are helping to get this message out.

Until next time...

Sources: The Waterloo Record
The Globe and Mail



The Gift of Life

Young or old, rich or poor, any one of us might one day get the chance to save or enhance someone's life by becoming an organ or tissue or blood/stem cell donor.

Your gift might give one of the thousands of Canadians desperately waiting for transplants a second chance – the chance to be healthy again, to watch their children or grandchildren grow, to go back to jobs they love, to enjoy all of life's simple pleasures.

Your gift will help your family feel some consolation in a time of terrible loss and then give them some sense that their loved one's death was not in vain.

Every three days, a person on the waiting list dies waiting for an organ or tissue transplant. Is the reason for this due to Canada not having the facilities to perform transplants? No. There are many hospitals across Canada that perform them. We have the expertise to save lives, but the organs aren't available. The major reason there is a shortage of transplantable organs is that the relatives of people who have died simply have not been asked. Some physicians forget to consider organ and tissue donation with a brain-dead patient or wrongly assume that the potential donor's family is too distressed to be approached.

In 2009, 700 lives were saved thanks to a record number of people giving the gift of life, just above the 691 completed the year before. However, the organ donor rate has barely moved since the beginning of the decade. In 1999 642 organ transplants were performed in Ontario.

Several myths about organ donation need debunking. Although many people believe their religion will not allow organ donations, virtually all major religions support it as a humanitarian act, even though all may not participate. Also, transplant doctors do not become involved until all efforts have been made to save a patient's life, the patient has been declared brain-dead, and consent for organs and tissue donations has been confirmed.

The donation process takes about 24 hours and the body is then released to the family for funeral arrangements. Incisions from surgery are carefully sewn up, so an open-casket funeral is possible. Health coverage includes organ donation, so there is no financial burden to donor families. There is no upper age limit for potential donors, but someone teenage or younger would need the consent of a parent or legal guardian. Transplantable organs include the heart, lungs, kidneys, liver, bowel, pancreas and stomach. Tissues include corneas, heart valves, bone, skin, tendons and ligaments.

A 2001 Health Canada/Enviro-nics poll revealed that while more than 90 per cent of Canadians approved of organ and tissue donation, only 46 per cent had signed donor cards or registered as donors. The intent to donate does not necessarily translate into actual donations – signing a card isn't enough. Potential donors

have to tell their families of their wishes. Doing so takes much of the pressure off both the family and the hospital's transplant coordinator at a very difficult time.

What are Stem Cells?

Stem cells are immature cells that can become either:








- red blood cells (which carry oxygen)
- white blood cells (which fight infection) or
- platelets (which help to stop bleeding).

What is stem cell transplant?

In a stem cell transplant, a patient's diseased bone marrow is replaced with healthy stem cells from a donor. To prepare for the transplant, the recipient is usually given high doses of radiation and/or chemotherapy to destroy the diseased marrow. At this point, stripped of the ability to manufacture life-giving blood cells, the recipient is extremely vulnerable. They will not survive unless the donor proceeds with the donation. Once the healthy stem cells are collected from the donor, they are given intravenously to the recipient as soon as possible.

HOW MUCH BLOOD DOES IT TAKE TO SAVE A LIFE?

The good news is that one blood donation - in just one hour
- can save up to three lives

Cancer treatment	 (up to 8 units/wk.)
Coronary artery bypass	 (up to 5 units)
Auto accident/ Gunshot wounds	 x5 (up to 50 units)
Liver transplant	 x10 (up to 100 units)
Other organ transplants	 (up to 10 units)
Brain surgery	 (4 to 10 units)
Fractured hip/ joint replacement	 (2 to 5 units)

One unit of blood is the equivalent to one donation

Deciding to become an organ, tissue, blood or stem cell donor is a very important personal decision. It is one that takes a lot of thought, discussion and consideration... and one that can have extraordinary results. By making a choice to be a donor, you may someday give someone the gift of life. For more information please go to the Trillium Gift of Life Network web site at www.giftoflife.on.ca and www.onematch.ca