



## “What about His Organs?”



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### Ray's Case

Ray, a 70-year-old man with a history of heavy smoking, type 2 diabetes and, hypertension, collapses. In the Emergency Department, his Glasgow Coma Scale is 5/15. He is intubated and taken for an emergency CT scan of his head that shows a large intracerebral hemorrhage with significant midline shift.

The neurosurgeon on call indicates that this condition is not compatible with survival and recommends withdrawal of life-support.

The health care professional caring for him asks about the possibility of organ and tissue donation.

Read on for more on Ray.

panencephalopathy, and active systemic bacterial, fungal, or viral infections.<sup>1</sup>

Although cancer usually excludes the possibility of donation, this is not the case with primary brain tumours, as some brain cancers carry low risk of metastasis beyond the brain stem.<sup>1</sup>

Organs and tissues from patients with infective hepatitis are eligible for donation to those who have hepatitis. National guidelines and organ transplant coordinators in your area can provide further information.<sup>1</sup>

### Questions and Answers

#### 1. *Is there an age limit for organ/tissue donation?*

Age is not a contraindication to donation. Organs have been donated by patients in their 90's and tissue by a patient of 102.

#### 2. *What are the medical criteria for donating organs and tissues?*

Organ and tissue donation remains a possibility for those with most chronic medical conditions. Health concerns, such as diabetes, hypertension, alcoholism, and smoking, are not contraindications for donation. Absolute contraindications include diseases with a risk of transmission, including HIV/AIDS, rabies, sub-acute sclerosing

#### 3. *Can organs and tissues be donated after cardiocirculatory death (DCD)?*

Vital organs, including the lungs, heart, liver, kidneys, pancreas, and small bowel, require perfusion with oxygenated blood. Organ donors are, therefore, optimally patients who have been declared brain dead and still have their hearts beating. Donation after cardiocirculatory death (DCD), however, allows organs and tissues to be used from nonheart beating donors.<sup>2</sup> DCD expands the donor pool to include patients with terminal or unbearable illnesses who elect to have life sustaining treatment withdrawn while still not meeting brain death criteria. This process allows patients to donate organs immediately after cessation of cardiac activity. In 2006, DCD of organs, including kidneys, livers, lungs, and tissues

was implemented in select institutions in Canada.<sup>2</sup>

Tissues, such as bone, skin, heart valves, and corneas, do not need continuous perfusion to maintain viability for retrieval and can be donated within 24 hours of death.<sup>3</sup>

### 4. *What is the best approach to suggesting organ and tissue donation to the family?*

The health care provider treating the patient should address the issue of donation with the next of kin. Approaching families to request donation is often avoided for fear of worsening the family's anxiety.

Yet, the knowledge that organ and tissue donation can benefit and save lives is often a source of comfort to relatives.

When approaching relatives to offer the option of donation, many recommend:

- Separating the conversations about brain death and the request for organ donation (known as “decoupling”)
- Approaching family members in a comfortable, private setting, ideally while they are sitting
- Providing information on the process of donation and transplantation to give families confidence

*Health care professionals should be aware of issues pertaining to organ and tissue donation to provide patients with enough information to make informed decisions about donation and to encourage discussion with others. Family doctors have access to trust from patients; hence, they are in a position to influence the public. Efforts in this regard make a positive impact on the organ and tissue donation rate.*

Figure 1

### Canadian Organ Transplant Rates

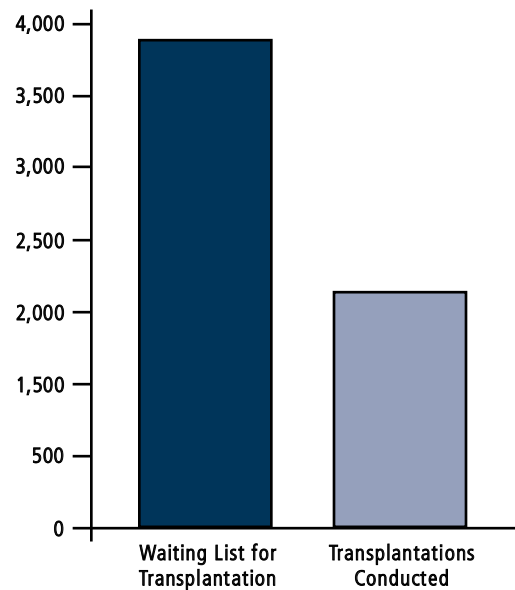


Figure 1: Graph displaying the discrepancy of Canadians waiting for transplantations and the Canadians who get them. In 2004, 195 Canadians died waiting for an organ transplant.<sup>4</sup>


The family should know the health care provider believes in organ donation and is not advising because he/she is “required to.” The concept of brain death, the process of donation, and common misconceptions are important matters to address (for example, that the process of donation does not

disfigure the body, and an open casket funeral is still a possibility).

Organ and tissue donation coordinators in your province can help with these decisions and discussions, and they should be involved as early as possible.<sup>5</sup>

## 5. *What can healthcare providers do to help improve the availability of organs for donation?*

Organ and tissue donation has an impeccable success rate. The one year patient survival rate for kidney transplantations is 98%.<sup>6</sup> Organ donation, however, is a rare event (Figure 1), and thus it is important that every potential donor be considered. As many people do not have much familiarity with the topic, doctors are well situated to provide awareness to help patients plan their futures and also offer comfort to relatives in the event of tragedy.

Health care providers can supply information to their patients in the form of conversation and should consider keeping pamphlets, posters, and brochures and suggesting that patients refer to websites covering the topic. 

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## Back to Ray

Twenty minutes after the family was informed of the severity of his situation, the physician and nurse caring for him sat down with them in a private room. They asked the family if they knew whether he had been registered as an organ and tissue donor, as this was a possibility for him.

The family said that he had never discussed it but felt that he would have wanted his organs to be used to help people if that was possible. He was transferred to ICU on life support and the process of organ and tissue donation began. Within 24 hours he was able to help two patients get off dialysis by donating his kidneys and save the life of a young woman suffering from liver failure. Both corneas were used for transplant. A variety of tissues, such as skin, bone, and heart valves, were retrieved and stored for later use. His heart and lungs were deemed medically unsuitable for organ transplant.

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