Medical Tourism: The challenges of dealing with transplant tourism

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College of Physicians & Surgeons of British Columbia

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How it works

Quick Contact

Complete the online application membership form. Upon approval of your application, we move ahead. We take extensive notes and understand your exact needs.
Kidney Transplant India

Kidney transplant is a surgery to replace a diseased or damaged kidney with a donor kidney. The donor may be a relative or friend. The donor can also be someone who has died and donated the organs.

A kidney transplant is done to replace a kidney that is no longer working and cannot be fixed. It may also be done if the kidney has been removed (e.g., as cancer treatment).

More than 90% of transplanted kidneys from deceased donors remain working after one year. The success rate often improves with a kidney from a living donor.

Kidney Transplant in India
In India, it is easy to spot kidney donors and get the transplant done. Thus, you avoid long waiting time in your home country. Before the surgery, extensive tissue typing would be done. Electrocardiogram (ECG, EKG), chest x-ray, psychological testing and counseling would be done prior to the procedure.

Description of the Procedure
The doctor will cut into the lower abdomen. The donated kidney will be connected to your arteries, veins, and ureter (tube that carries the urine to the bladder). In most cases, the diseased kidneys will be left in place. The doctor will then close the incision. The new kidney may start producing urine right away or within a short time.

Immediately After Procedure you will have a catheter left in your bladder. This catheter will be connected to a bag to collect urine. You will also be on medication. You will be in the hospital 3-4 days after the surgery.
The case of a returning ‘tourist’

• 62 yo man with ESRD from DM2
• On hemodialysis for 18 months
• Referred for transplantation, but has no living kidney donors
• Travelled to Asia for a living unrelated donor kidney transplant
• Presents ~ 1 month post transplant for ongoing outpatient transplant care
<table>
<thead>
<tr>
<th>Information at presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What we knew</strong></td>
</tr>
<tr>
<td>• Living donor, blood type compatible</td>
</tr>
<tr>
<td>• ATG induction, now maintained on standard triple immunotherapy</td>
</tr>
<tr>
<td>• Post-transplant bloodwork on 3 occasions – normal renal function</td>
</tr>
<tr>
<td><strong>What we didn’t know</strong></td>
</tr>
<tr>
<td>• Name/contact of institution/medical team</td>
</tr>
<tr>
<td>• Donor infectious disease workup (incl HIV/HCV/CMV/EBV status)</td>
</tr>
<tr>
<td>• Donor medical/psychological suitability</td>
</tr>
<tr>
<td>• Recipient medical workup</td>
</tr>
<tr>
<td>• HLA matching/tissue typing</td>
</tr>
<tr>
<td>• Details of surgery and follow-up care</td>
</tr>
<tr>
<td>• Financial details</td>
</tr>
</tbody>
</table>
Clinical course

• Normal renal function (SCr 103umol/L), well

• 1 month later – presents to hospital with sepsis and AKI → ICU

• Infectious workup negative

• Transplant biopsy - granulomatosus interstitial nephritis with the presence of microsporidia within the renal tubules

• Graft failed within 3 months of transplant – currently remains on dialysis (now highly sensitized)
What is transplant tourism

• Transplant tourism refers to travel for organ transplantation that involves organ trafficking and/or transplant commercialism.

• Travel for transplantation is the movement of organs, donors, and recipients or transplant professionals across jurisdictional borders for the transplantation process

• Transplant tourism is distinguishable from other forms of medical tourism because it involves a donor whose interests and wellbeing must be considered just as importantly as the recipient

• The medical resource used in transplant tourism is often an exploited donor
10% of transplants worldwide are estimated to occur as a result of transplant tourism

Source: SRTR Analysis, August 2007

*Candidates removed from U.S. waiting lists, with either 1) foreign transplant directly noted in waiting list removal records or 2) indication of transplant at other than the listing center with confirmation of foreign transplant by listing center
Canadian experience

Gill et al. Kid Int 2011

Prasad et al. Trans 2007
Concerns about transplant tourism

- Source of organs
- Health of living donors
- Safety of recipients
- Public health risks
- Ethics of commodification of organs
- Stifling self-sufficiency in inbound countries
Is this an ideal donor?
Characteristics of vendors

• Vendors’ self reported co-morbidities
  – jaundice 7.8%
  – malaria 5.7%
  – recurrent stone disease 2%
  – recurrent UTI 5%

Naqvi et al. AJT 2008
Post donation complications

### Table 2: Postnephrectomy complaints and complications

<table>
<thead>
<tr>
<th>Complaint</th>
<th>Kidney vendors (n = 104)</th>
<th>Control donors (n = 184)</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical weakness</td>
<td>71 (68.3%)</td>
<td>4 (2.1%)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Fatigue</td>
<td>11 (10.5%)</td>
<td>0 (0%)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Fever</td>
<td>35 (33.7%)</td>
<td>4 (2.1%)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Pain at site of surgery</td>
<td>61 (58.7%)</td>
<td>20 (11%)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Urinary tract symptoms</td>
<td>50 (48.1%)</td>
<td>6 (3.2%)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Dyspepsia</td>
<td>14 (13.4%)</td>
<td>4 (2.1%)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Loss of appetite</td>
<td>10 (9.6%)</td>
<td>0 (0%)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Depression</td>
<td>5 (4.8%)</td>
<td>1 (0.5%)</td>
<td>0.010</td>
</tr>
</tbody>
</table>

### Table 5: Laboratory findings in vendors and controls

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Kidney vendors (n = 104)</th>
<th>Control donors (n = 184)</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hemoglobin gm/dL</td>
<td>14.09 ± 1.8</td>
<td>14.21 ± 1.36</td>
<td>0.268</td>
</tr>
<tr>
<td>PCV</td>
<td>41.96 ± 6.0</td>
<td>41.4 ± 3.5</td>
<td>0.351</td>
</tr>
<tr>
<td>Leukocyte count / cmm</td>
<td>8684 ± 1867</td>
<td>8327 ± 2137</td>
<td>0.52</td>
</tr>
<tr>
<td>Platelets x 10 9/L</td>
<td>223.2 ± 62.7</td>
<td>227.1 ± 177.2</td>
<td>0.0001</td>
</tr>
<tr>
<td>Creatinine mg/dL</td>
<td>1.17 ± 0.21</td>
<td>1.02 ± 0.27</td>
<td>0.0001</td>
</tr>
<tr>
<td>Random blood glucose mg/dL</td>
<td>93.02 ± 20.6</td>
<td>99.0 ± 14.2</td>
<td>0.0005</td>
</tr>
<tr>
<td>GFR by Cockcroft-Gault mL/min</td>
<td>70.94 ± 14.2</td>
<td>95.4 ± 20.44</td>
<td>0.0001</td>
</tr>
<tr>
<td>&lt; 60</td>
<td>27 (23.9%)</td>
<td>5 (2.7%)</td>
<td>0.0001</td>
</tr>
<tr>
<td>60 – 90</td>
<td>68 (65.4%)</td>
<td>69 (37.5%)</td>
<td>0.0001</td>
</tr>
<tr>
<td>91 – 120</td>
<td>9 (8.7%)</td>
<td>110 (59.8%)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Urine protein/creatinine ratio</td>
<td>0.15 ± 0.11</td>
<td>0.10 ± 0.10</td>
<td>0.0001</td>
</tr>
<tr>
<td>0 – 0.1</td>
<td>37 (36.3%)</td>
<td>136 (73.9%)</td>
<td>0.0001</td>
</tr>
<tr>
<td>0.1 – 0.2</td>
<td>49 (47.1%)</td>
<td>33 (18.0%)</td>
<td>0.0001</td>
</tr>
<tr>
<td>0.2 – 0.3</td>
<td>10 (9.6%)</td>
<td>11 (5.9%)</td>
<td>0.25</td>
</tr>
<tr>
<td>&gt; 0.3</td>
<td>8 (7.7%)</td>
<td>4 (2.1%)</td>
<td>0.02</td>
</tr>
<tr>
<td>ALT IU/L</td>
<td>26.6 ± 21.3</td>
<td>28.17 ± 17.0</td>
<td>0.01</td>
</tr>
<tr>
<td>AST IU/L</td>
<td>38.2 ± 18.4</td>
<td>27.0 ± 12.34</td>
<td>0.0001</td>
</tr>
<tr>
<td>Deranged liver functions</td>
<td>14 (13.4%)</td>
<td>5 (8.7%)</td>
<td>0.02</td>
</tr>
<tr>
<td>Anti-HCV positive</td>
<td>25 (24%)</td>
<td>2 (1.0%)</td>
<td>0.0001</td>
</tr>
<tr>
<td>HbSAg reactive</td>
<td>4 (3.8%)</td>
<td>1 (0.5%)</td>
<td>0.04</td>
</tr>
<tr>
<td>Anti-HCV + HbSAg positive</td>
<td>2 (1.9%)</td>
<td>0 (0.0%)</td>
<td>0.059</td>
</tr>
</tbody>
</table>

Naqvi et al. AJT 2008
Concerns about transplant tourism

- Source of organs
- Health of living donors
- Safety of recipients
- Public health risks
- Ethics of commodification of organs
- Stifling self-sufficiency in inbound countries
Outcomes of transplant tourism

N=20 commercial living donor transplant recipients vs. LRD, LURD performed at St Michael’s Hospital (1998-2005)

N=33 tourists vs. LRD, LURD performed at UCLA (1995-2007)

Prasad et al. Trans 2007
Gill et al. CJASN 200
Infectious complications

- Viral infections 3 times more common (esp CMV)
- Multiple reports of exotic infections including tuberculosis, malaria, and aspergillosis

**Table 6. Infectious complications after transplantation**

<table>
<thead>
<tr>
<th>Complication</th>
<th>Tourist (n [%]; n = 33)</th>
<th>Matched Cohort (n [%]; n = 66)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>17 (52.0)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>32 (48.5)&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Viral</td>
<td>12 (36.0)</td>
<td>9 (13.6)</td>
</tr>
<tr>
<td>CMV</td>
<td>10 (30.0)</td>
<td>8 (12.1)</td>
</tr>
<tr>
<td>HBV</td>
<td>1 (3.0)</td>
<td>0</td>
</tr>
<tr>
<td>HSV</td>
<td>1 (3.0)</td>
<td>0</td>
</tr>
<tr>
<td>EBV</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>VZV</td>
<td>0</td>
<td>1 (1.5)</td>
</tr>
<tr>
<td>Bacterial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pneumonia</td>
<td>1 (3.0)</td>
<td>5 (7.6)</td>
</tr>
<tr>
<td>UTI</td>
<td>4 (12.0)</td>
<td>14 (21.2)</td>
</tr>
<tr>
<td>wound</td>
<td>2 (6.0)&lt;sup&gt;c&lt;/sup&gt;</td>
<td>2 (3.0)</td>
</tr>
</tbody>
</table>

<sup>a</sup>EBV, Epstein-Barr virus; HBV, hepatitis B virus; HSV, herpes simplex virus; VZV, varicella zoster virus.
<sup>b</sup>Total number of patients with at least one infection (includes patients with multiple infections).
<sup>c</sup>Pertinephric abscess and peripancreatic abscess.

Gill et al. CJASN 2008
Prasad et al. Trans 2007
Sever et al. KI 2001
Onwubalili et al. Trans Int 2007
Concerns about transplant tourism

• Source of organs
• Health of living donors
• Safety of recipients
• Public health risks
• Ethics of commodification of organs
• Stifling self-sufficiency in inbound countries
Warning to Travelers About New, Drug-Resistant 'Superbug'

Published: Thursday, 12 Aug 2010 | 15:56 PM ET
By: Madh Ms
Medical Journalist, Author

Medical tourism, family travel and international migration have combined to import a potent new form of antibiotic resistance halfway around the planet—and the physician-researchers who have tracked its rapid spread say it is already on the verge of becoming unstoppable.

News of the new resistance factor has been percolating in smaller medical reports for a few months, including the weekly bulletin of the US Centers for Disease Control and Prevention (which I covered on my blog in June). But Wednesday’s announcement, published "ahead of print" on the website of the journal Lancet Infectious Disease, signals a higher level of concern.

Interestingly, it sounds an international alarm bell.

The resistance factor, known as New Delhi metallo-beta-lactamase, or NDM-1, has already been found in India and Pakistan, Sweden, the Netherlands, Australia, Canada and the US. It is appearing in very common bacteria, such as the gut bacterium E. coli, a common cause of urinary tract infections, and in other bacteria that cause illnesses such as pneumonia.

All of the bacteria in which NDM-1 has been found have been what are called Gram-negative bacteria. That's a significant concern—because while new drugs to treat increasingly resistant Gram-positive bacteria such as MRSA are in short supply throughout medicine, drugs for the class known as Gram-negative have been even slower to come to market.

For several years, authorities, such as the Infectious Diseases Society of America, have been warning that the lack of new drugs for Gram-negatives is a true crisis that warrants creating new incentives for pharmaceutical companies to invest in antibiotic development.

NDM-1, found in India and Pakistan, Sweden, the Netherlands, Australia, Canada and the US, is appearing in...
# Declaration Card

**Part A**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last name, first name and initials</td>
<td>Date of birth</td>
<td>Citizenship</td>
<td>Last name, first name and initials</td>
</tr>
<tr>
<td>Date of birth</td>
<td>Y</td>
<td>Y</td>
<td>M</td>
</tr>
<tr>
<td>Citizenship</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Part B**

**Visitors to Canada**

- Gifts (excludes alcohol and tobacco) valued at no more than CAN$50.
- 1.5 L of wine or 1.14 L of liquor or 24 x 355 ml cans or bottles (0.5 L) of beer or ale.
- 200 cigarettes, 200 tobacco sticks, 50 cigars or cigarillos, and 200 grams of manufactured tobacco.

**Part C**

**Residents of Canada**

Each resident returning to Canada is entitled to one of the following personal exemptions based on their time absent from Canada (include all goods and/or gifts purchased or received abroad):

- 24 hours: CAN$50
- 48 hours: CAN$200
- 7 days: CAN$750

**Part D**

**Visitors to Canada**

- Duration of stay in Canada
  - Yes: No
- Do you or any person listed above exceed the duty-free allowances per person? (See instructions on the left.)

**Residents of Canada**

- Do you or any person listed above exceed the exemptions per person? (See instructions on the left.)

**Complete in the same order as Part A**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date left Canada</td>
<td>Value of goods</td>
<td>CAN$ purchased or received abroad (including gifts, alcohol &amp; tobacco)</td>
<td>Date left Canada</td>
</tr>
<tr>
<td>YY</td>
<td>MM</td>
<td>DD</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Organs (kidney, liver, heart)
I have undergone a medical procedure
I have visited a hospital
Concerns about transplant tourism

- Source of organs
- Health of living donors
- Safety of recipients
- Public health risks
- Ethics of commodification of organs
- Stifling self-sufficiency in inbound countries
What has been done to address this issue?
address the growing problems of organ sales, transplant tourism and trafficking in organ donors in the context of the global shortage of organs, a Summit Meeting was held in Istanbul of more than 150 representatives of scientific and medical bodies from 78 countries around the world, and including government officials, social scientists, and ethicists.
The Declaration of Istanbul
Principles on Organ Trafficking and Transplant Tourism

• Organ trafficking and transplant tourism violate respect for human dignity and the principles of equity and justice and should be prohibited.

• Because transplant commercialism targets impoverished and otherwise vulnerable donors *, it inexorably leads to inequity and injustice and should be prohibited.

  (*such as minors, illiterate and impoverished persons, undocumented immigrants, prisoners, and political or economic refugees)

• This prohibition should include a ban on all types of advertising (including electronic and print media), soliciting, or brokering for the purpose of transplant commercialism, organ trafficking, or transplant tourism.
The Declaration of Istanbul—early impact and future potential

Gabriel M. Danovitch & Mustafa Al-Mousawi

The Declaration of Istanbul on Organ Trafficking and Transplant Tourism was adopted at an international meeting held in 2008. The Declaration has been published globally and consists of a preamble, a set of principles and a series of proposals to improve the ethics and expand the benefits of the international organ transplantation endeavor. To promote and monitor the implementation of the Declaration, a Declaration of Istanbul Custodian Group (DICG) has been created. The DICG has provided support for official efforts to ban the sale of organs, restrict transplant tourism and prosecute those who persist in violating the law. Substantial progress has been made thus far in countries that have been the source of transplant tourists and in countries that have been the source of donor organs for trafficking. In China, however, the use of organs from executed prisoners for transplantation purposes continues despite widespread condemnation of this practice. (Nature Reviews Nephrology, 4, 333-337, 2008)

[Read the full article - requires login to Nature Reviews Nephrology]

How Deceased Donor Transplantation Is Impacting a Decline in Commercial Transplantation—the Tamil Nadu Experience

The Declaration of Istanbul Is Moving Forward by Combating Transplant Commercialism and Trafficking and by Promoting Organ Donation
How do we handle this on the front line?
How do we handle returning ‘tourists’?

- We MUST provide emergent care

- We can arrange for alternate long-term care
  - Ideally explained before transplantation – so there is no expectation of care
  - Must be reasonable
  - Cannot discriminate against an individual patient
What should we tell patients to prevent them from going?

- Medical risks
  - ‘buyer beware’ – lack of accountability
  - Care may be compromised - even upon return to Canada
    - Poor/unreliable documentation and early transfer

- Unethical treatment of organ vendors

- Offer alternatives – support the pursuit of legitimate emotionally related living kidney donors locally

- Doctor’s should share any personal objections

- Provinces and Territories may not cover expenses incurred outside of Canada related to the illegal transplantation of organs
The Declaration of Istanbul

In 2008, a group of leading medical experts from around the world met in Istanbul, Turkey to develop strategies to prevent organ trafficking and transplant tourism.

The group well appreciates the desperation felt by many patients in need of a transplant. It put forth a number of principles and proposals designed to promote both deceased and living donor transplantation around the world in a manner that protects the health and welfare of both recipients and donors while ending exploitation. They developed a policy document called The Declaration of Istanbul.

In 2010, the Declaration of Istanbul Custodian Group (DICG) was formed to promote the principles of the Declaration internationally. The DICG is sponsored by two major international professional organizations, The Transplantation Society (TTS) and the International Society of Nephrology (ISN). More than 80 international professional societies and governmental agencies have endorsed the Declaration of Istanbul.

For more information:

DECLARATION OF ISTANBUL CUSTODIAN GROUP

www.declarationofistanbul.org

Introduction

For many patients with end-stage kidney disease transplantation is the treatment of choice. Transplantation is a sophisticated procedure requiring an experienced team of surgeons and nephrologists in an advanced hospital environment. Kidneys transplants may come from a deceased donor or a living donor.

The availability of a deceased donor kidney and its allocation to you will depend on practices that are specific to your country of residence and are not discussed further here.

A living kidney donor is typically a close blood relative. In some countries a legal or emotional relationship (such as a spouse, partner, or friend) may be acceptable for donation. In each of these cases the act of donation is done willingly as an expression of love, trust, and mutual concern. The donor and recipient each care that the other has a safe and successful outcome. Transplants like these are performed openly and legally, and the outcome is typically excellent for both the recipient and the donor from a medical, psychological, and social point of view.

There is however, another source of living donor kidneys. Some people, in dire financial distress, may be willing to sell one of their kidneys. The buying and selling of kidneys is called “transplant commercialism”, and it is illegal in almost all countries of the world. Kidneys taken from executed prisoners are also sometimes sold.

This brochure discusses some of the implications for you in buying a kidney and is meant to discourage you from taking this step even out of desperation.

What exactly is transplant commercialism and tourism?

In transplant commercialism, there is an exchange of money or some other form of significant material benefit between the recipient and the donor, either directly or more frequently, through a middleman or broker who collects a fee for “services.” The donor (really a “kidney seller”) also receives money, usually much less than what the broker collects. As a result the amount of money spent by the recipient is more than would be paid for a legal transplant. Most medical insurance does not cover commercial transplantation.

Leaving your country of residence to undergo transplantation is commonly called “transplant tourism.” Most transplant professionals disapprove of the practice and are concerned that the level of care you receive will be inferior to that you will receive in your own country.

Why is transplant commercialism illegal?

- Many countries have laws that specifically ban transplant commercialism.
- Most likely it is illegal in the country where you live.
- Transplant commercialism results in more harm than good.
- It exposes donors and recipients to unnecessary dangers and undermines the healthy development of organ donation in both the home country of the recipient and the country they travel to purchase a kidney.
Thank you