Americans Gamble on Bargain Surgery Abroad

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Review

NEW YORK -- Even as the U.S. dollar sags, many Americans are still heading overseas for bargains on elective cosmetic procedures and other surgical care they could not afford otherwise.

In some cases, they are also seeking experimental therapy unavailable in the U.S., such as last-ditch stem-cell-infusion therapy for myocardial ischemia. They may also be trying to jump to the head of the line for an organ transplant.

The scope of so-called medical tourism depends on how it is defined. It could be as mundane as simply crossing the border by car for simple dental work. It could mean elaborate highly planned excursions to Malaysia, Thailand, Singapore, India, Argentina, Brazil, Costa Rica, El Salvador, Turkey, and other destinations.

- **Watch:** Clinical Presentation: Suphachai Chaithiraphan, M.D.

Some observers estimate that as many as 150,000 Americans head across the border or overseas every year for therapy they can't afford or can't get here. Others view that number as greatly inflated.

Some say that cosmetic and other therapy at established centers overseas is little riskier than it is here. Others invoke caveat emptor.

The economic case can be compelling, though: at the age of 53, Howard Staab, a self-employed carpenter from Durham, N.C., needed surgery to repair a leaking mitral valve.

Staab was told by Durham Regional Hospital that the procedure, with associated fees, hospital charges, and aftercare, could cost upwards of $200,000.

Instead, he traveled to Escorts Heart Institute and Research Center in New Dehli, where the mitral valve reconstruction was performed by Naresh Trehan, M.D.

Dr. Trehan a former assistant professor at New York University Medical School, gave up a Manhattan practice that brought in nearly $2 million annually to set up shop in his native country.

The procedure had to be converted to mitral valve replacement because of post-repair septal anterior motion. Yet the bill for the surgery and a three-week hospital stay set Staab back only $6,700.

The total cost for the one-month trip, which included a three-week hospital stay and airfare, was less than $10,000, said Staub's partner, Maggi Grace.

"I was completely impressed, and continue to be impressed, with the meticulous care, the spotless facility, and the way the nurses came in pairs or in threes to render care, always immediately, and never with any hint of being overworked," she said.

In addition, all of the tests Staab required before surgery were performed the day after they arrived in India, whereas in Durham they had been told they would have to wait for weeks, she added.

Grace has written a book about the experience and, with Staab, testified about the trip at a U.S. Senate special committee on aging hearing on "healthcare globalization."

Dr. Trehan has said that the 30-day mortality rate for patients undergoing coronary artery bypass graft at his center is 0.8%. That compares favorably with an overall U.S. national rate of 2.9% for 2000-2002, as reported by the Society of Thoracic Surgeons.

Experimental therapy

Cost aside, another powerful motivation for some patients who seek care in foreign climes is the availability of procedures that are either not approved or not offered in U.S. hospitals.

At the Chaophya Hospital in Bangkok, Thailand, Supachai Chaithiraphan, M.D., and colleagues harvest 250 cc of blood from patients with end-stage ischemic heart disease.

The samples are sent to a laboratory in Israel where angiogenic precursor cells are isolated and expanded in the laboratory, and are then returned to Thailand, Dr. Supachai said during a briefing here.

About one week after the initial blood draw, the cells are either reinfused into the coronary circulation via an angiographically directed catheter, or are injected directly into heart muscle.

Cells introduced into the circulation appear to stimulate angiogenesis and improve blood flow, whereas those injected into heart muscle are believed to differentiate into cardiac myocytes, fuse with muscle fibers, and promote secretion of cytokines that in turn recruit other circulating progenitor cells to help improve cardiac function, Dr. Supachai said.

To be eligible for treatment, the patients have to have no-option coronary artery disease with evidence of irreversible ischemia and accessible vascular channels, and to be ambulatory.

At the briefing, Dr. Supachai reported experience with the technique in 86 patients, 77 men and six women from the ages of 38 to 94 (mean 69.7). In all, 74 of them traveled to Thailand to receive the experimental therapy.

Fifty-six percent of the patients had angina, 88% had congestive heart failure, 88% had dyslipidemias, and 60% had hypertension. A majority of the patients had previously undergone CABG, percutaneous coronary interventions, or had received an implantable cardioverter-defibrillator. Two-thirds of the patients had left ventricular ejection fractions below 40%.

"Thus far we have done this procedure for a little over two years, and our first patient is still doing well," Dr. Supachai said.

Prior to treatment, the patient had a left ventricular ejection fraction of 38%, and at a visit early this year it had improved to 46%.

"Clinically he's doing well; he's doing a lot of things that he used to enjoy before he had coronary disease," Dr. Supachai said.

A second patient who could walk only about 20 steps before tiring before treatment told Dr. Supachai that after stem-cell therapy he was walking three miles in under an hour every day, and that his ejection fraction had improved from 34% to 59% within six months.

The hospital and cell-preparation costs are approximately $22,000, plus travel expenses.

The Chaophya hospital is one of five hospitals in Thailand and in Singapore offering stem cell therapy for end-stage heart disease.

Thailand is also a destination for medical tourists with a very different agenda from those of Dr. Supachai's patients: it is one of the world's leading centers for sex reassignment surgery.

The boom in medical tourism in recent years has spawned the growth of a new travel market, with specialized agencies ready to serve their clients' clinical and travel needs, whether they're Americans seeking cosmetic surgery, or Canadians who don't want to wait up to a year for a government-funded hip replacement.

One such agency, with offices in the United States, Canada, Great Britain and India, advertises that it provides "high-quality, affordable medical services abroad coupled with a world-class escape thereafter."

Instead of having travel agents, the company has "case managers" who book both hotel and hospital beds, arrange transportation, and sit in on clinical consultations with overseas physicians. The company also has host country managers who serve as patient liaisons at patient destinations.

Another agency, MedRetreat, says it has about 400 potential patients under evaluation-a process taking 30 to 45 days-- for trips to one of 20 hospitals where it has done "due diligence" in 12 cities in eight countries-Malaysia, Thailand, India, Argentina, Brazil, Costa Rica, El Salvador, Turkey, and South Africa.

Patrick Marsek, the managing director of MedRetreat, says about 70% of the patients for whom it has arranged trips are seeking cosmetic surgery-about 50 to 65 a month. Most patients call Florida, California, Texas, and Alaska home, he said,

Malaysia is the most popular destination, he said, although India is a little less expensive for the procedure itself. But post-procedure hotel costs in India are much more expensive, he said.

Although MedRetreat checked out the hospitals, there are no guarantees of medical satisfaction, Marsek noted. Suing for malpractice overseas would in impractical, he added.

Renal Graft Results

And things don't always go so smoothly for medical tourists. Many return home bearing new kidneys from live donors, fresh surgical scars, and something they never bargained for -- surgical complications, systemic fungal infections, and compromised grafts that in some cases require nephrectomy, leaving the patients back at square one, or even dead, according to G.V. Ramesh Prasad, M.D., of the University of Toronto and colleagues.

"Patients considering this method of acquiring live-donated kidneys should be counseled of the inherent risks and possible serious adverse outcomes including diminished dialysis-free graft and patient survival," Dr. Prasad and colleagues said at the 2006 World Transplant Congress in Boston. "Worsening organ shortages and lengthening wait-times are likely to increase the frequency of this phenomenon in the near future."

They reported the outcomes of 22 Canadians who went abroad for transplants from "non-biologically or non-emotionally related donors," and compared them with results from 175 biologically related donations and 75 emotionally related donations performed at their center during the same period (1998 to 2005).

In all, about 5% of the renal transplant recipients they treated purchased a kidney abroad. Twelve of those grafts were performed in South Asia, five in East Asia, four in the Middle East, and one in Southeast Asia.

One third of all the patients transplanted outside of Canada required immediate hospitalization, primarily for sepsis, and one-third required hospital admissions, with stays averaging 19 ± 36 days (range 4 to 113 days). Two patients required allograft nephrectomy.

The litany of infectious and surgical complications included opportunistic infections in 52%, pyelonephritis (including multi-drug resistant *E. coli* infections) in 38%, cytomegalovirus in 23%, fungal infections in 19%, tuberculosis in 14%, cerebral and spinal abscesses (5% each), wound infections in 25%, allograft nephrectomy (10%), wound dehiscence (10%), lymphocoele (10%), plus obstructive hydronephrosis, urine leak, and metastatic cancer (5% each).

In comparison with the patients who received their transplants in Toronto, the transplant tourists also had significantly worse three-year graft survival. Among patients who received kidneys from relatives, three-year graft survival was 98%, and among those who got kidneys from friends or from "emotionally related" donors, survival was about 86%, compared with about 62% for the non-biologically or emotionally-related kidney recipients.

In a separate study also presented at the World Transplant Congress, Muna T. Canales, M.D., of the University of Minnesota and Hennepin County Medical Center in Minneapolis, and colleagues, reported on the outcomes of 10 U.S. residents who decided to try their luck with foreign renal transplants.

The investigators found that complications occurred in six of the 10 patients, including cyclosporine A-related seizures, severe wound infection, aspergillus infection of the central nervous system, post-transplant non-insulin-dependent diabetes, urosepsis, and CMV infection requiring hospitalization.

Despite those caveats, many patients seeking medical care overseas would likely agree with Maggi Grace, the enthusiast. If she wants an elective procedure and is told she'd have to wait, "I'm going to India."
