

# ODD MAN OUTMAN

Special Investigation: How a self-taught doctor from Delhi cornered the black market in kidneys, building one of the world's most lucrative organ-trading rings, until it all came crashing down.

**T**HE DAGINGI couple flew from Athens to Delhi in January 2008 on a mission to save her life. With her husband, Leonidas, she took a taxi from the airport past sparkling multiplexes and office buildings to a guesthouse in the booming exurb of Gurgaon. A kitchen staff was on hand, the rooms had cable, and there was a recreation area with billiards, providing patients with creature comforts while kidney transplants were arranged. Over the next week, as her operation was scheduled, Dagiassi went to a makeshift hospital for dialysis. Then one night, while she was watching TV with her husband, a chef turned off the lights and urged everyone to leave. Shortly afterward, 10 policemen stormed in. "We were too stunned to react," says Leonidas Dagiassi, a former fisherman who borrowed money from his employer to finance the trip. The couple and other guests were hauled off for questioning. The Gurgaon hospital, it turned out, was the hub of a thriving black market in kidneys. The organs were harvested from poor Indian workers, many of whom had been tricked or forced into selling the organ for as little as \$300.

The mastermind, India's Central Bureau of Investigation (CBI) charged, was Amit Kumar—a man who performed the surgeries with no more formal training than a degree in ayurveda, the ancient Indian system of medicine. In a career spanning two decades, Kumar had established one of the world's largest kidney trafficking rings, with a supply chain that extended

by Yudhijit Bhattacharjee

to the Indian countryside. Some patients were from India. Many came from Greece, Turkey, the Middle East, and the United States.

At parties in India and abroad, Kumar presented himself as one of India's foremost kidney surgeons, said Rajiv Dwivedi, an investigator based in Delhi. The claim is entirely illegitimate: Investigators claim that Kumar has performed hundreds of unsuccessful transplants, a practice made possible in part because he was able to finance the operation through movies and had to fend off threats from the Mumbai mafia. Kumar was arrested at a wildlife sanctuary in Nepal and brought back to India, where he now awaits trial.

Kumar's operation was a microcosm of the shadowy underworld of transplant medicine that extends from the favelas of Rio de Janeiro to the slums of Manila. The tentacles of the trade crisscross the globe, reaching into countries untouched, not even the United States, as evidenced by the July arrest of a New York rabbi who has been charged with arranging illegal transplants in this country by bringing in poor supply kidneys.

In 2008 I traveled to India to get an inside look at Kumar's ring and examine the enterprise that fueled its rise. How did Kumar build his organ empire, and was he able to run it for so long? In interviews, I learned, lay in the grinding and entrenched corruption of India, the concentration of patients on dialysis, and the casual nature of the black market kidney business—which, though dominated by kidney exchange, includes live transplants as well. The factors at play in the kidney trade to thrive around the world despite efforts by various governments to stamp it out.

**Life without a working kidney is harsh.** We are born with two of these internal filters, located below the rib cage, to remove waste and excess water from our blood. Patients with kidney failure—often the result of diabetes and high blood pressure—can die within days from the toxins in the bloodstream and loss of organs. To avoid this, modern medicine offers dialysis, a process in which blood is cleansed at least

Near right: The exterior of Kumar's hospital in Gurgaon as it appeared shortly after the 2008 crackdown. Set inside a gated community, it hid its true purpose with a sign advertising legal services. Far right: The operating room in which kidneys were transplanted behind closed doors.



three times a week by pumping it through an external or internal filter. This grueling routine comes with dietary restrictions and side effects like itching, fatigue, and risk of infection. Theoretically you can live on dialysis for decades; in reality, though, risks are so great that without a new kidney, premature death is the frequent result.

No wonder that those needing a kidney vastly exceed the number of kidneys available from deceased donors. In the United States, some 88,000 individuals were on the waiting list as of early 2010, with 34,000 names typically added every year. The wait averages five years. The situation in Greece is similarly dire: Eleni Dagiasi put her name on a list around 2006 and expected a waiting period of five years or more. In the meantime, she needed dialysis three days a week—a treatment requiring that she live in Athens, more than 75 miles and three hours' travel from her husband, who works on Andros Island as a caretaker of yachts. After Eleni learned of the India option through one of Kumar's brokers, the couple saw it as a way out.

They could have gone elsewhere: to Pakistan, where entire villages are populated by men who have been stripped of a kidney; to China, where kidney harvesting from executed prisoners has supported a booming transplant industry; or to the Philippines, where transplant tourism flourished until May 2008, when the government banned the trade. Transplant tourism today accounts for as much as 10 percent of all donor kidneys transplanted, says Luc Noël, coordinator for Essential Health Technologies at the World Health Organiza-

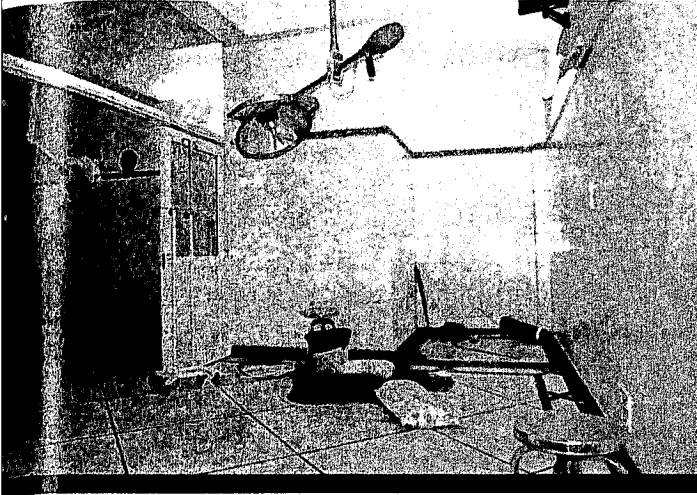
tion (WHO). Often lured by middlemen (or drugged, beaten, and otherwise coerced), donors end up with a few hundred to a few thousand dollars and a scar at the waist that has become an emblem of exploitation and human indignity.

The kidney trade has its origins not in the underworld but in the bright light of medical advancement and the globalization of health care. It began in a hospital in Boston in 1954, when a medical team led by plastic surgeon Joseph Murray conducted the first successful kidney transplant from one identical twin to the other. There was no immune rejection to contend with because the donor's and recipient's organs had coexisted happily in their mother's womb. Through the 1950s and '60s, researchers attempted to make transplants work in patients who were unrelated to their donors. To help the new organ withstand the assault from the recipient's natural defenses, doctors developed tissue type matching, a technique to determine if the chemistry of the donor's immune system, defined by antigens on the surface of cells, was similar to that of the recipient's. Doctors also bombarded the recipient with X-rays and used a variety of drugs to beat the immune system into submission.

In the early 1980s transplants became feasible on a wider scale. What changed the scene was an immunosuppressant molecule called cyclosporin, developed by researchers at Sandoz, the Swiss pharmaceutical company. It became the foundation for new drugs that could counter organ rejection with unprecedented effectiveness.

The possibilities quickly became evident. "Doctors realized that with cyclosporin,

# Kumar has performed hundreds of successful transplants, a practice so lucrative he was able to finance Bollywood films.



you did not need a related donor," says Lawrence Cohen, an anthropologist at the University of California at Berkeley. Clinics were able to cast a wider net for donors, and kidney transplants became an established surgery around the world. Soon kidneys were a commodity. The first reports of kidney selling began to surface in India around 1985. With its large base of doctors and an expanding health care industry, India had already been attracting medical tourists from the rest of South Asia and the Middle East. Now there was a growing stream of patients from these countries checking into hospitals in Chennai, Mumbai, and Bangalore for kidney transplants. "There were lots and lots of sales," Cohen says.

In Southeast Asia another kidney trading corridor had opened up, with the Philippines as the hub. Patients from Japan and elsewhere traveled to Manila to buy kidneys. The organs often came from jailed felons, according to Nancy Scheper-Hughes, a U.C. Berkeley anthropologist who has documented the trade in various countries. "Guards would pick out the healthiest-looking prisoners," she says. Some reports allege that buyers negotiated with the prisoners' families, not the prisoners themselves. Meanwhile, China became the destination for patients from Singapore, Taiwan, and Korea. Under a rule approved by the Chinese government in 1984, kidneys and other organs were harvested from executed prisoners. Human rights activists became concerned that China might have been ramping up its executions through the 1980s and '90s in order to boost its organ supply.

The practice was gaining notoriety, but

interventions urged by WHO and others often failed. India legislated its Transplantation of Human Organs Act, banning the buying and selling of organs, in 1994. But the law did not eliminate the practice; it simply drove it underground. By the end of the decade, the kidney trade was thriving, largely due to the Internet. Web sites touting "transplant packages"

priced from about \$20,000 to \$70,000 sent patients, many of them Americans, flocking to hospitals in the Philippines, Pakistan, and China. In 2001, when authorities apprehended a criminal syndicate trafficking kidneys from slum dwellers in Brazil and poor villagers in Moldova to Israelis, it became evident that the trade had spread far and wide.

**When Kumar was arrested** on February 7, 2008, he struck a defiant pose for the cameras as Nepalese officials prepared to escort him to Delhi. In the weeks that followed, he became a media celebrity, with investigators leaking stories about his flamboyant lifestyle. News reports alluded to Kumar's owning properties in India, Hong Kong, Australia, and Canada. Sher Bahadur Basnet, a Nepalese police official who apprehended Kumar, told me that he made frequent trips to nightclubs and casinos in Kathmandu. In an ironic twist, an Indian news channel discovered a clip from an obscure 1991 Hindi flick titled *Khooni Raat* ("bloody night") in which Kumar—who harbored ambitions of becoming a movie star—plays a bit role as an upstanding police officer.

The first time I saw Kumar was in June 2008 at a court in Ambala, some 125 miles northwest of Delhi. The court had yet to open its doors when I arrived, and I sat outside on a bench. Two of the ring's employees—a driver named Harpal and a cook who worked at the guesthouse, Suresh—showed up, wiping their faces with handkerchiefs. They told me they had no idea that Kumar had been conducting illegal transplants.

A police van drove up carrying Kumar and his accomplices, including his youngest

brother, Jeevan Raut (Kumar's original family name), who has a degree in homeopathy; a middleman named Gyasuddin; and a physician named Upender Dublish. Dressed in a beige shirt, Kumar waved at his lawyers from behind the vehicle's rusty iron-mesh window. He had shaved off his mustache and his eyes looked bulbous. He glanced about furtively while talking with his lawyers.

I inched closer to the van under the gaze of policemen standing nearby, one of whom told me sternly that reporters were not allowed. Nonetheless, I introduced myself to Kumar, who responded with a nervous smile. "I never forced anybody to donate a kidney," he told me before a portbellied guard shooed me away. Inside the courtroom, Kumar kept primping his hair and smoothing out his shirt while the prosecutor, Ashok Singh, presented the charges, citing complaints by seven men alleging that they were tricked or forced into selling their kidneys. Kumar looked crestfallen as he was led back to the van, but his brother walked with a swagger, yelling out to me, "They have no case against us!"

**A**t the start of their investigation, CBI officials found it difficult to believe Kumar had been conducting transplants on his own. "We thought his role was to provide donors and clients," Dwivedi told me. The agency assembled a panel comprising a surgeon, a nephrologist, and a forensic medicine expert to probe Kumar's self-proclaimed expertise. In a two-hour interview not unlike a qualifying exam, the panelists asked Kumar to walk them through the steps involved in a transplant, from removing a kidney to hooking it up inside a recipient. By the end they were convinced. "Kumar had adequate theoretical knowledge about the surgical process" for kidney transplants, the panel said in a report filed in court.

Yet when Kumar entered the transplant business in the 1980s, it was not as a surgeon but as an entrepreneur. To understand how a leading organ dealer got his start, I visited Kumar's second-youngest brother, Ganesh Raut, a real estate developer who now lives in the same Mumbai apartment where Kumar set up a hospital

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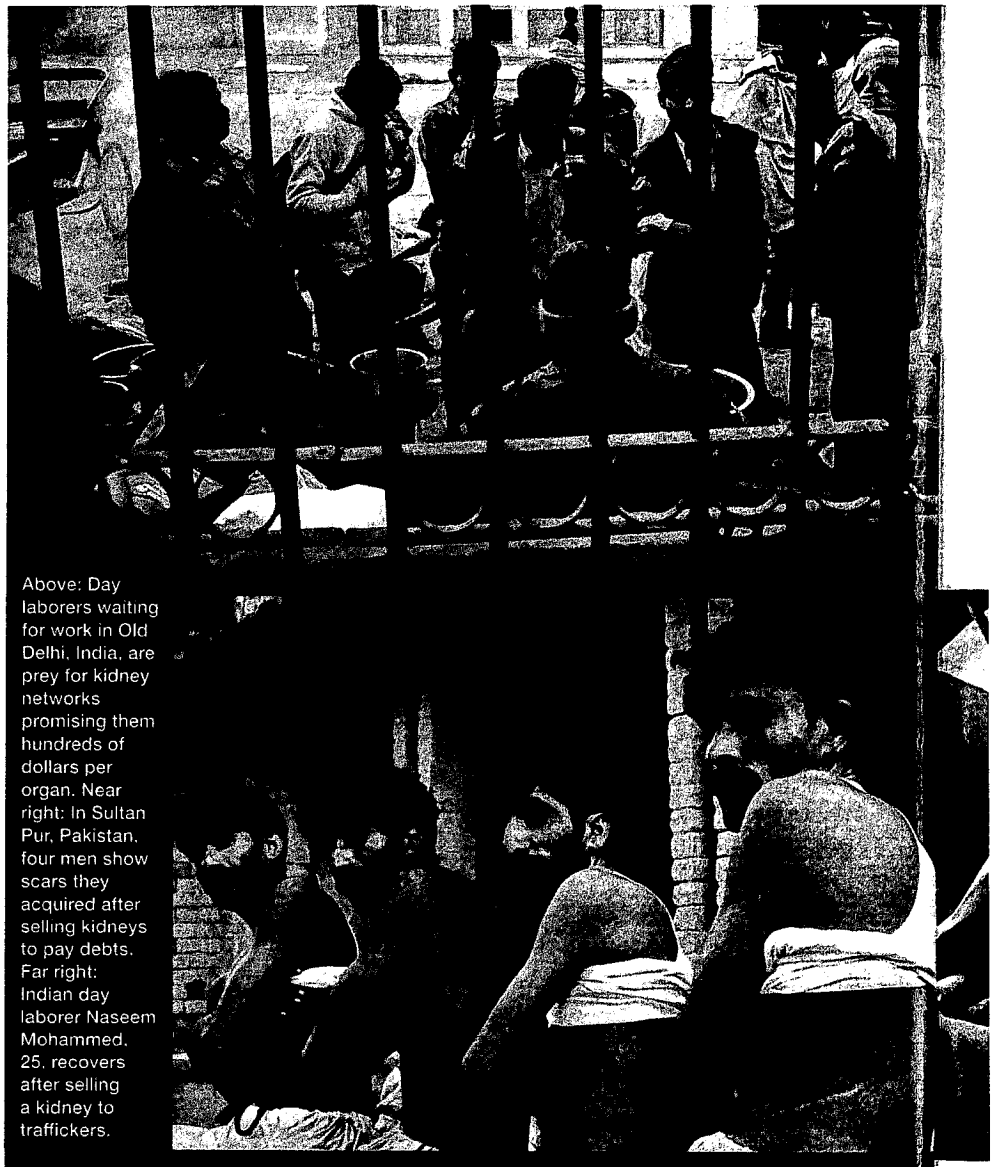
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the early 1990s, the business  
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Above: Day laborers waiting for work in Old Delhi, India, are prey for kidney networks promising them hundreds of dollars per organ. Near right: In Sultan Pur, Pakistan, four men show scars they acquired after selling kidneys to pay debts. Far right: Indian day laborer Naseem Mohammed, 25, recovers after selling a kidney to traffickers.

performed at the hospital (many of them by a Mumbai Hospital surgeon named Yogesh Kothari) provided Kumar with the equivalent of a surgical residency. He attended conferences, read up on nephrology, and learned about different kinds of sutures and immunosuppressant drugs. In 1994 he performed his first transplant under Kothari's watch. But after a shortchanged donor filed a complaint, police raided Kumar's hospital that August, arresting 11 people on charges of cheating and criminal conspiracy. Kumar himself was charged with conducting illegal foreign exchange transactions through two front men—a grocer and a silversmith—who had helped him receive payments from overseas clients to the tune of \$60,000.

After four months in a Mumbai prison, Kumar was freed on bail. In 1995, after Maharashtra (the state that contains the

city of Mumbai) banned organ selling, he was busted again and charged with conducting illegal transplants. Finally he fled to Jaipur, 800 miles to the north. There he assumed his new name and conducted 13 illegal transplants before being arrested yet again, in 1996. Released on bail, he disappeared from view and did not resurface until 1999, in Gurgaon. There Kumar built an empire bigger and more organized than ever as the Indian legal system churned sluggishly on.

While Kumar was setting up business in Gurgaon, Scheper-Hughes, Cohen, and two other academics were launching Organs Watch, a program to document exploitative organ transplantation worldwide. As Kumar's business boomed, the researchers visited Brazil, Turkey, the Phil-

# Americans are not just buyers; some may be sellers. One Los Angeles man offered to sell his brother's kidney on Craigslist.

ippines, and elsewhere to interview hundreds of kidney sellers (including victims of coercion and fraud) along with buyers, doctors, and police.

As a result of new regulations, the climate for kidney dealers has gotten tougher. China implemented regulations in 2007 to stop the organ trade. Pakistan's last president, Pervez Musharraf, issued an ordinance that same year to outlaw organ trafficking, which last April survived a legal challenge by a petitioner who called it un-Islamic. And in May 2008, the Philippines, which for years had promoted transplant tourism, followed suit. Yet, like a multiheaded hydra, the indus-

names containing the word *kidney*, such as "kidney4u." The Orkut pages of these users are typically blank and presumably exist only as a place for potential buyers to leave a message.

Americans are not just buyers; some may be sellers as well. Schepers-Hughes discovered "an older brother in the Los Angeles area offering to sell his younger brother's kidney online on Craigslist." The phenomenon has opened up a new form of trade, diffuse and fragmented, that has already increased the number of commercial transactions manifold and ushered in new kinds of abuse. And money is not the

only inducement, says Monir Moniruzzaman, an anthropologist at Michigan State University in East Lansing. In a study of the organ trade, he has found numerous ads that promise jobs, visas, and even citizenship in the developed world.

**Driving from Delhi** to Gurgaon in June 2008, I glimpsed the soaring skyscrapers of Gurgaon's economic boom, but shanties closer to the ground spoiled the glossy view. Finally I entered the gated residential community where Kumar's hospital, sealed by the CBI, sat

in a row of villas. It was enclosed by a wall and draped by bougainvillea vines whose pink flowers stirred in the muggy afternoon breeze. Peeking through the locked iron gate, I saw a stretcher left behind on the grounds. Having escaped from Mumbai and Jaipur, Kumar set up a clandestine facility here, putting up a sign advertising a lawyer's services. "The idea was to keep nosy neighbors away," CBI's Dwivedi said.

Kumar did not work alone. One of his main accomplices, the physician Upender Dublish, ran a hospital in Ballabgarh, an industrial town about two hours away. Bald and rotund, Dublish projects the resigned air of a man terribly wronged but too beaten to protest. At the Ambala courtroom, he told me with a pained look that he needed medical attention for a heart ailment. Dublish ran Kumar's supply chains, in which the

more enterprising donors became middlemen themselves. The result was a pyramid scheme, which Schepers-Hughes says is common to kidney markets around the world. She has seen the pattern in Brazil and Moldova. "Middlemen will say to prospective donors, 'I lived through it and made money; you can too.'" An early recruit was Gyasuddin, whom I saw with Kumar in Ambala. He told me he sold his kidney for \$1,000 and became a node in Kumar's network, earning about \$110 "for every donor I could find." He brought dozens of donors to Kumar from his hometown, Meerut, an old city about 40 miles from Delhi.

**E**ven as old charges from past arrests slogged through the legal system, Kumar's layers of protection grew. In 2004 he set up an in-house tissue-matching facility at the hospital to avoid dealing with external diagnostic labs, which he felt would draw the attention of law enforcement

officials. But what really prevented exposure was corruption and lack of government oversight. In October 2003, a 55-year-old Turkish patient named Mehmet Bayzit died at the hospital. Bayzit's relatives wanted the body flown back home, which meant that it had to be embalmed. There was a problem, though: Embalming centers need a death certificate, which in turn requires a doctor's report.

The situation threatened to attract scrutiny of Kumar's operations. Dublish came to the rescue. He wrote a report on his Ballabgarh hospital letterhead, stating that Bayzit came to his hospital after experiencing chest pains on his way back from a trip to see the Taj Mahal. The report, citing cardiac arrest as the cause of death, enabled Dublish to obtain a death certificate from local municipal authorities. When two more Turkish patients died, in 2004 and 2005, Dublish used the same story as a cover-up. Indian authorities started an investigation only in 2006, when the Turkish embassy in Delhi, prodded by the patients' relatives, requested an inquiry. Still Kumar remained unscathed.

In fact, Kumar did not just evade the law; he turned to it for help. In his testimony to the CBI, he claimed that he received extortion threats from men working for Chota Shakeel, a Mumbai mobster. In 2007,



try seems to be surviving legal onslaughts in countries like India and branching into newer, more vulnerable places such as Iraq and sub-Saharan Africa. "It gets snuffed out in one place and crops up in another," Schepers-Hughes says.

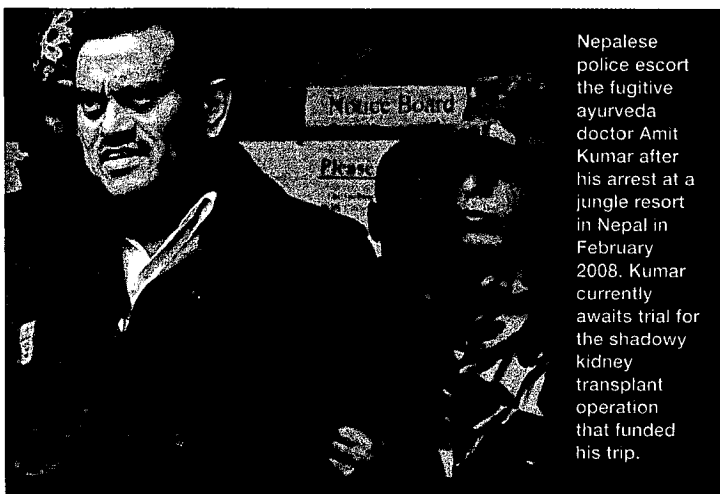
The trade is adapting to the changing legal climate. One shift has been venue: Transplant surgeries seem to have moved out of large hospitals to small clinics away from the public eye. "We even have anecdotal reports of surgery being transferred to private homes," WHO's Noël says.

Another change is in marketing. Gone are the blatant online advertisements for transplant tours. Instead, dealers posing as private sellers post personal ads on Facebook. When the social networking site Orkut outlawed transplant-related communities, it saw a proliferation of user

lodged a complaint, the Cell of the Mumbai Police suspected of issuing akeel's behalf. Competence and corruption in is too outrageous to believe. alth made him a target for uthorities, the government ix investigators to study his ugust 2006. They ignored the ospital was unlicensed and enue for illegal transplants. bergasted that Kumar had io taxes for years, the Indian ent sent him a notice that

eggshells into the street. I zigzagged through lanes that got progressively narrower, passing a dimly lit lathe shop, to finally arrive at a cluster of houses attached to one another like calcifications on a bone.

There, in a two-story structure, I found the Prakash home. Vidya once made a living repairing analog fare meters for auto-rickshaws. When digital meters came online he fell on hard times, he said, and had to sell his blood just to eat. One day he came down with a fever, and a local blood broker turned kidney hunter offered to take him to Gurgaon for treatment. After some lab tests at the Gurgaon hospital, he claims, he



Nepalese police escort the fugitive ayurveda doctor Amit Kumar after his arrest at a jungle resort in Nepal in February 2008. Kumar currently awaits trial for the shadowy kidney transplant operation that funded his trip.

ould follow. Kumar promptly apartment four checks total- n, but when the department he checks, they bounced. In , Delhi police apprehended 's accomplices in January reportedly paid a bribe of to a group of police officers r the man's release. c turned on January 24, 2008, able in Moradabad, a town witnessed a fight between e middleman, and a donor Prakash; Prakash charged n had stolen his kidney. The i to the nearby police station, jin directed police to the hos- house, resulting in raids and, ar's arrest. leerut to see Prakash, the ght down the ring. To get to alked through a quiet alley ot children played cricket ennis ball and a woman in a to dump vegetable peels and

was taken for "stomach surgery." When he regained consciousness, there was a scar on his waist. Prakash says that Kumar's men, including Gyasuddin, threatened him physically when he complained.

But other kidney sellers in Meerut told me that Prakash had been a part of the pyramid. Among those he had allegedly lured was Mohan Lal (not his real name), a 16-year-old who had run away from his village after his father discovered his affair with a girl from a different caste. Lal was wandering through Meerut's streets in search of work when, he claims, Prakash offered him a job as a dishwasher at the Gurgaon guesthouse. Once Lal reported for work, he says, he was taken for "free" medical tests and falsely diagnosed with a gallstone that Kumar's assistants told him needed immediate surgery. (Piyush Anand, a senior CBI official who supervised the investigation, said a number of complainants were similarly misled.) After he was relieved of a kidney, Lal reluctantly

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## A TRANSPLANT TOURIST

When H. Q., a 46-year-old accountant, was diagnosed with end-stage liver failure at Mt. Sinai Medical Center in New York City, he was given a single option: Wait for a new liver in the United States, where thousands of others were already queued up ahead of him. A year later H. Q.'s illness had worsened, but no donor had emerged. That is when friends suggested he pay for a transplant without the wait, by going to China.

Desperate, H. Q. became a transplant tourist, securing a liver—probably from an executed prisoner—in 2004. Yet the procedure left him with a bacterial infection so severe that the new liver, too, was irreparably damaged. Ultimately, H. Q. needed a second transplant to survive.

In all, more than 100,000 Americans are waiting for transplants across the range of organs—heart, lung, kidney, intestine, pancreas, and liver; some 12 percent will die before their turn arrives. As a result, hundreds of Americans underwent transplants abroad between 2004 and 2006, according to the Scientific Registry of Transplant Recipients.

"Transplant tourism from the United States is growing in direct correlation to the organ shortage," says Mt. Sinai liver doctor Thomas Schiano, who published H. Q.'s case in *Liver Transplantation* in 2010. "The bottom line is that governments have to find solutions to provide transplants to those who need them," Luc Noël of the World Health Organization says.

H. Q.'s botched procedure highlights the murky ethics involved. Did his Chinese donor give permission? Did the lure of profit from an organ sale hasten an execution? Doctors at Mt. Sinai had to decide whether to provide a precious replacement organ to someone who had already bought one under this kind of cloud.

"It's a tough call, but we were dealing with a patient who was going to die," Schiano says. "The ethics committee decided it would be wrong to withhold the standard of care that we would normally provide, so we proceeded."

AMY BARTH

# ORGANS

accepted cash and continued to work at the guesthouse for several months.

According to Lal and two other kidney sellers, Prakash complained to the police in Moradabad only after a falling-out with Gya-suddin over commission. Prakash, a key witness in the case against Kumar, denies these allegations, but the irony is rich: Kumar's operation may have been undone not by proactive law enforcement but by squabbling within the ranks.

# AA

**week after** I saw Kumar in Ambala, officials took him to Mumbai for questioning on the charges filed back in 1995. They tried to duck the media by switching trains, but I managed to follow along. On a June evening, I sat outside the police station where Kumar had been taken for interrogation and jotted down questions for a written interview. Through the windows of the jailhouse, I watched Kumar sitting in front of a desk, across from a police officer who had taken my queries to him. He was dressed in prison clothes: a striped vest and pajamas. He looked haggard. Between sips of tea, he scribbled answers.

"Being a good surgeon, that was always my dream," he wrote. He explained his ayurveda degree: His high school exam scores had been just shy of what he needed to get into medical school. He bragged about his self-taught skills. "I helped recipients get well, and in turn they helped donors lead somewhat better lives."

Kumar's defense echoes arguments made by those proposing legalization of the kidney trade, such as Oxford ethicist and philosopher Janet Radcliffe Richards. In a 1996 paper in the *Journal of Medicine*

and *Philosophy*, Richards wrote that it was a fallacy to view the trade in terms of the "greedy rich" and the "exploited poor." Such misplaced moral indignation, she wrote, "leave[s] behind one trail of people dying who might have been saved, and another of people desperate enough to offer their organs thrust back into the wretchedness they were hoping to alleviate."

The debate is not an easy one to settle, as I learned when I met with Govind Verma (not his real name), a father from Delhi whose 8-year-old son, Rahul, received a transplant from Kumar in January 2008. After I repeatedly rang the doorbell of his house one morning, Verma appeared on a second-floor balcony and nervously looked down at me, then reluctantly ushered me into his living room. In a tremulous voice tinged with guilt, he told me that his son's kidneys had failed at age 5 from infections caused by urinary reflux. The boy hardly went to school. In the fall of 2007, Verma took him to Chennai in hopes of getting a transplant, but the surgeon was arrested, and kidney sales in that city were stopped. A family acquaintance sent him to Kumar, who, out of sympathy, charged a discount price of \$12,000 for the job. Rahul no longer needed dialysis, Verma told me, and was seeing friends again. "I had no choice," Verma said. As he led me out to the gate, his eyes shone with tears. "There were times when I thought of killing myself," he said, motioning with his hand to suggest jumping from the balcony upstairs.

Rahul's life may have improved, but none of the donors I met in Meerut or Mumbai seemed to have climbed out of poverty. Rakesh, a homeless man in Meerut, said the \$1,000 he got after being tricked into giving up a kidney allowed him to buy drugs and alcohol for two months without having to work. Along with two other homeless donors, he was living in the compound of an abandoned government building. He told me that he was too ashamed to go back to his village.

What I found is borne out by Madhav Goyal, a Johns Hopkins doctor and bioethicist who interviewed more than 300 Indian men compelled to sell their kidneys in the mid-1990s. The bulk of their fees—an average of

\$1,070—was used to settle the debts that had driven them to make the sale in the first place. The rest was gobbled up by basic needs like food and clothing. Using the cash to start a small business, such as a tea stall or an auto-rickshaw service, remained a pipe dream.

Free-trade proponents argue that donors would fare much better under a government-regulated program, which could provide incentives such as lifelong health insurance or college tuition for the donor's children. Schepers-Hughes counters that the concept amounts to a "kidney tax" on the poor, exacting an unfair price for basic services and opportunities. She points to Iran, which has allowed kidney donations for cash since 1988, virtually eliminating the waiting list for the organ. A survey of 500 Iranian donors who received \$1,200 and a year of medical insurance from the government found that their quality of life, as measured by factors like financial condition and psychological health, remained poor three to six months after the donation. "Nobody denies that most donors live in extreme poverty; many are drug addicts," says WHO's Noël. "There is candid recognition in Iran now that the scheme is working well only for the recipients."

Indian officials find it hard to imagine a financially compensated donor program that would be free of exploitation. Singh, the CBI lawyer, says that initially, recipients might pay the price set by the government, but soon they would start looking for bargains. It would amount to giving the likes of Kumar a hunting license, he argues.

Sale of an organ will always be "an unequal transaction," CBI director Vijay Shankar, who has since retired, told me. Legalizing the trade would further institutionalize India's glaring social inequalities while providing an unfair advantage to rich nations like the United States (see "A Transplant Tourist," page 70). His words echoed in my head the next morning when I stepped outside my hotel in Gurgaon, where guests were eating a breakfast of aloo parathas, omelets, and juice. At the hotel gate, a man from the shantytown across the street was sharpening knives for the hotel's kitchen, a weekly assignment that earned him \$3. As sparks flew from his grindstone, he told me that even with Gurgaon's booming economy, he was struggling to feed his family. When he rode off, I imagined how life would change for him if he sold a kidney. [9]

## MARCH'S WHAT IS THIS? EARWAX



It may not be pretty, but cerumen (commonly known as earwax) serves an important function by keeping the ear canal free of dirt and microbes. It comes in two varieties, dry and wet, and in 2006 Japanese researchers identified a single letter in the genetic code that determines which type a person has.