

Transplant Trends

Liver and Kidney Transplantation

A Medical First For Arizona: Domino Liver Transplant

Two Phoenix-area men are embracing their normal lives following their participation in the first-ever “domino” liver transplant done in Arizona, a creative way to optimize the limited supply of available

“It’s an innovative way to help two patients with one liver”

– Dr. David Douglas

donor organs. The milestone procedures took place at Mayo Clinic Hospital (MCH) in north-east Phoenix on Jan. 22, 2003.

A domino transplant is one in which the liver of one patient is removed and then transplanted into a second patient. The first patient receives a liver from a deceased donor. It is a rare procedure, reportedly completed only 18 times in the

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Robert Espinoza, left, and James Cashman compare experiences, post-surgery.

Domino Patients Share Lifelong Bond, Identical Scars

James Cashman and Robert Espinoza were aware that they were in rooms across the hall from each other at Mayo Clinic Hospital (MCH). And it did not escape them that they were making news as the state’s first domino liver transplant patients.

Still, they chose not to meet each other before the surgeries that would forever forge a physical bond between them. Transplant professionals agree that a potentially emotional meeting like that could impose extra pressure on patients – when their focus should be on staying healthy until the surgeries are over.

But on Tuesday, Jan. 28, 2003, just six days post-surgery, Espinoza walked into Cashman’s room, pausing momentarily to gauge the receptivity of the

man who made his new liver possible. Cashman flashed him a smile, inviting him in. A comfort level developed immediately.

Robert, an engaging man who “never stops with the jokes,” according to his daughter, Cynthia, was initially somber and remarked how hard it is to find the words to thank someone who donates a life-saving organ. The two then reflected on the difficulty of sharing joy at a time when a family, somewhere, was grieving over the loss of a loved one.

Then, within minutes, the two men were comparing identical, three-pronged scars on their abdomens – scars, they agreed, that bear a slight resemblance to “a Mercedes emblem.”

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A Medical First For Arizona: Domino Liver Transplant *(continued from page 1)*

U.S. in 2002, and only slightly more than 200 times in the world.

Named a “domino” transplant because of the three, sequential surgical procedures, it is one solution to the “wait or innovate” dilemma. Two patients in great

donated his liver to 64-year-old Robert Espinoza, of Gilbert, Ariz. Espinoza suffered from primary sclerosing cholangitis (PSC), a progressive disease that attacks the bile ducts of the liver. There is no cure for either disease, and

Named a “domino” transplant because of the three, sequential surgical procedures, it is one solution to the “wait or innovate” dilemma.

need of a liver transplant are able to be transplanted sooner – rather than waiting for a liver that may come in, but too late. “It’s an innovative way to help two patients with one liver,” explains David Douglas, M.D., chair, Transplantation Medicine, Mayo Clinic in Scottsdale.

The two men needed new livers for entirely different reasons. James Cashman, 43, of Phoenix, suffers from familial amyloidotic polyneuropathy (FAP), a genetic disorder in which his liver produces an abnormal protein that can damage his heart, gastrointestinal system and nerves.

Cashman, who received a liver from a deceased donor, then

both men were in serious need of a liver transplant to survive.

Domino transplants are uncommon, in part because of the unique medical circumstances required. Pivotal to success of the procedure is the fact that Cashman’s liver, once removed from his body, will function normally and not pose a medical threat to Espinoza for 20 to 30 years.

“Previously, we would have discarded the abnormal liver,” says Dr. Douglas. “But in this rare situation, we are able to give this particular liver to someone who could have died while waiting for a donor.”

For more on patients James Cashman and Robert Espinoza, see pages 3-5

‘Phones Don’t Ring

Even Buddy the dog seemed to sense the drama and the significance of the occasion. When his owner, James Cashman, was wheeled out of Mayo Clinic Hospital (MCH) on January 30, 2003, a jubilant Buddy leapt wildly toward him – but stopped just short of pummeling his fresh surgical site.

So much had happened during the six days leading up to that moment. In the annals of medical science, six days to recover from landmark liver transplant surgery is considered nothing short of remarkable. To Buddy, it was an eternity of waiting for his now celebrated owner to come home.

Cashman was patient number two in the three delicate surgical procedures that constitute a domino transplant – and a historic event for Mayo Clinic and the southwest. A rare set of medical circumstances enabled Cashman, 43, who suffers from familial amyloidotic polyneuropathy (FAP), to donate his liver to 64-year-old Robert Espinoza, who had a disease that attacks the bile ducts of the liver. Cashman, in turn, received a liver from a deceased donor. This was all possible because Cashman’s liver, once removed from his body, no longer exhibits symptoms of FAP and therefore is a healthy and appropriate liver for Espinoza.

The upshot of those unique circumstances is that two Phoenix area men are again healthy – because of the generous gift of one liver from someone they will never be able to thank.

Cashman, a quiet yet complex man

Cashman

at That Hour Unless it's Something Big'

– a native of a small town near Des Moines, Iowa – was more than prepared for his role in the domino procedures. He had pretty much diagnosed his disease himself, following intense research and Internet surfing. His father, it turns out, had died of FAP at age 49, before the U.S. medical community had specifically identified the symptoms that comprise the complex disorder. Cashman's subsequent homework led him to announce, to himself, in 2001, "I have an answer. This is what my dad went through."

In his life before illness, Cashman worked in custom home construction, where he says he took pride in his craft. His most recent world, however, has been consumed with staying healthy enough to withstand transplant surgery – and with his voracious reading about FAP. Typically, with FAP, an abnormal protein ravages the body's neurological, coronary and gastrointestinal systems, circumstances that relegated Cashman to a sedentary lifestyle that was not of his choosing.

So it was not uncharacteristic for Cashman to be on the Internet yet again at 2:30 a.m. on Wednesday, Jan. 22, when the call came from Mayo Clinic that a liver had come in. "I was up, on line," acknowledges Cashman. "When the phone rang, I knew it had to be time for the surgery. Phones don't ring at that hour unless it's something big."

A frail, yet prepared Cashman then said goodbye to Buddy and headed for



James Cashman his best pal, Buddy, as he is discharged from MCH.

MCH, accompanied by his sister, Joan Jensen, with whom he has been living while waiting for the transplant.

At 1 p.m., with cameras rolling to capture the moment, James Cashman assumed his leading role in the medical drama that would play out for a total of nearly 20 hours in the surgery suites at MCH. It was a sequence of events in which there were no "bit parts."

And although the two patients were unable to take any bows at that point, their surgeons, David Mulligan, M.D.,

and Adyr Moss, M.D., spoke on their behalf. "We're very pleased. Things went better than we had anticipated," pronounced Dr. Moss. Added Dr. Mulligan, "They both did great. This is an exciting day for all of us."

As for Cashman, his future plans will be taken in baby steps. His immediate goal was to take Buddy on a "real" walk, as he said. "I don't mean just a few steps out to the corner. I mean a real walk in the desert. A vigorous walk with Buddy."

A Disease ‘Like a Time Bomb’ was Reality for

Robert Espinoza

To see Robert Espinoza in January 2003, it would be difficult to detect that his liver was in crisis, chipping away at his vigorous life – threatening to end his days as a hard-working family man and avid golfer.

Espinoza’s smile is broad, his humor keen, and those meeting him for the first time can’t believe he is 64 years old. Or, more surprising, that his liver, greatly damaged by a disease called primary sclerosing cholangitis (PSC), needed to come out of his body soon, before it developed cancer.

His liver disease, and unusual medical circumstances closely monitored by David Douglas, M.D., chair, Transplantation Medicine, Mayo Clinic in Scottsdale, united the Gilbert, Ariz., man with James Cashman, 43, Phoenix, in an uncommon way on Jan. 22, 2003. Yet the two men shared a common goal: to both receive life-saving liver transplants at Mayo Clinic Hospital (MCH).

Cashman and Espinoza did not meet before surgery, but were aware of the complex events that needed to line up before they were to qualify as the state’s first rare domino transplant surgeries. Cashman’s liver had to be a blood and size match for Espinoza – and to be in



Robert Espinoza shares a personal moment with his wife, Eleanor, shortly before the domino surgery.

good enough condition so as not to cause problems for the older patient for at least two decades or more. Espinoza needed to be monitored rigorously to make sure his liver would remain cancer-free – to even qualify for the transplant procedure.

Dr. Douglas explains that Espinoza, who was on the waiting list for a liver for the past three years, had a seemingly good quality of life, but that his health had deteriorated. Importantly, his disease, PSC, predisposed his liver to cancer. “If he had developed

bile duct cancer, he would not be a candidate for the transplant,” warns Dr. Douglas. “This disease is like a time bomb.” PSC, in stealth fashion, causes inflammation, scarring and hardening of the bile. Transplantation is the treatment of choice.

Following surgery, it was confirmed that Espinoza’s liver was in bad shape, more so than the medical team had anticipated. There was no doubt that it had to be removed and for a new liver to replace it so that Espinoza could continue to run his

Gilbert-based masonry company – and to live life to the fullest. And that life includes golf, he insists.

The heavens were at last aligned for Cashman and Espinoza in the early morning of Wednesday, Jan. 22, 2003,

“I hope all of Arizona takes notice and recognizes the crucial need for organ donation and the fact that because one family was this charitable, two of us are able to live.”

– James Cashman

when a liver became available from a deceased donor. The two were told to drive carefully, yet head for the hospital in short order.

While privately Cashman and Espinoza were relieved that the moment had come for their long-awaited transplants, both men grieved over the loss that some other family was experiencing. “It was a courageous and wonderful thing that a family, at the darkest time of their lives, having lost a loved one, was able to step forward with that kind of generous spirit,” says Espinoza. Noted Cashman, “I hope all of Arizona takes notice and recognizes the crucial need for organ donation and the fact that because one family

was this charitable, two of us are able to live.”

Cashman’s surgery took place first, on the afternoon of Wednesday, Jan. 22, when his liver was removed and he was implanted with the donor liver. Espinoza followed later, at 6 p.m., but not until his family kissed him goodbye, and his wife, Eleanor, held his hand tight until he was wheeled to surgery. Their daughter, Cynthia, made one last request of the medical team: “Tell my dad how much I love him. I always try to tell him that first, before he tells me. Now, for once, I’m beating him to the punch.”

Even while being wheeled away for the momentous occasion, in typical humorous fashion, Espinoza pleaded, “But I have a tee time on Sunday!”

He obviously missed his tee time, as well as an opportunity to attend the Phoenix Open golf tournament. But, post-surgery, as he was getting ready to be discharged from MCH, Espinoza, accompanied by Eleanor, who had been at his side daily, hugged MCH staff people. His parting words: “I don’t know how they did it – from diagnosing my disease and keeping me going until the transplant, to this. I feel great.”

MCH Approved for Pancreas Transplantation

Mayo Clinic in Scottsdale is approved to begin pancreas transplantation at the Transplant Center at Mayo Clinic Hospital (MCH). Approval was granted by the United Network for Organ Sharing (UNOS), the national organization that administers organ procurement and placement.

Pancreatic transplantation, a multi-disciplinary clinical and surgical program, is lead by Adyr Moss, M.D., and David Mulligan, M.D., on the surgical side. Leading the medical team is Raymond Heilman, M.D., and Marek Mazur, M.D.

Most pancreas transplants are done in conjunction with or following a kidney transplant. In certain cases, although less common, a pancreas can be transplanted alone, without a prior or simultaneous kidney transplant.

Celebration of Life 2002 at



HEALTH REVISITED

Kidney transplant recipient Ed Gorton and his wife, Barb, celebrate the day. Ed received a kidney from his sister, Sherrie Hait, California, and the two of them represented Mayo Clinic at the U.S. Transplant Games in Florida in 2002.



GENEROSITY SPEAKS VOLUMES

Liver transplant recipient Glenda Rosenbloom, and husband, Alan, California, pose next to the generous gift they made to the Arizona Transplant House. The couple, committed to the success of the House, donated the seven-foot statue of an angel intended to bring inspiration to transplant patients.

CELEBRATING SUCCESS

Dr. David Mulligan, left, transplant surgeon, celebrates with patient Ken Stratford, Pocatello, Idaho, who is healthy and fit after receiving a living donor liver transplant from his son, Troy, in 2001.



Arizona Transplant House

AN UNCOMMON BOND
Patrick Hansen, left, MCH chaplain, pays tribute to Susan Bockwinkel, far left, liver transplant recipient, and especially to Sarah and Ron Crues, the parents of Susan's donor, Pete. Pete died in an accident, and because of his commitment to organ donation, his liver was donated to Susan.



WINNING TEAM
A successful kidney transplant is a team effort. A key member of the team is patient Joe Feczko, Sun City, Ariz., center, who is joined by his medical team, Dr. Adyr Moss, left, transplant surgeon, and Dr. Ray Heilman, right, nephrologist.



SHOW OF STRENGTH
An angel seems a fitting background as patients Sherri Dobson, left, and Linda Linden, far right, celebrate with Dr. David Douglas.

A ‘Superstar’ Admits:



Wayne Coleman – A “Superstar” for all new reasons.

For “Superstar” Billy Graham, the biggest battle of his life occurred outside the wrestling ring. Graham, whose real name is Wayne Coleman, was an icon on the mat in the 1970s and 80s, during which time he grappled with some notoriously unruly opponents.

But Coleman’s ultimate fight began nearly five years ago when he was diagnosed with the incurable hepatitis C virus.

“The prognosis without a transplant is eventual death,” confirms Valerie Coleman, Wayne’s wife.

“He had stopped talking and just slept all day. He was not there. I truly had lost my husband.” During the fall of 2002, Wayne’s chronic fatigue — also brought on by hepatitis C — took a heavy toll on his life.

“I just couldn’t stay awake,”

admits Coleman, 58. “Some days I would go to bed at 6 p.m. and not get up until noon. I slowly gave in to the symptoms, and the negative results set in.”

Because of his deteriorating condition, Coleman was moved up on the liver transplant waiting list at Mayo Clinic Hospital (MCH). Just weeks later, at 1 p.m. on a Friday in late October, Wayne received the phone call that he was waiting for from

‘Words Can’t

Mayo Clinic in Scottsdale. He was instructed to come to the hospital. A deceased donor liver was available, and the procedure needed to begin immediately.

“The transplant has turned my life around literally. I am in the process of writing my autobiography and I hope to have it finished this summer. My life was spared and I was saved.”

—Wayne Coleman

“Superstar” Billy Graham

“We live only a few minutes from Mayo Clinic Hospital,” Wayne explains. “But during that short trip it was a total adrenaline rush like I have never had before. I was like a babbling idiot. It was total chaos. If you have a date on a calendar, you can plan for the date. This totally caught me off guard.”

The surgery began a couple of hours later, and the team performed the transplant procedure in just over three hours.

“When I woke up with my new liver I never felt so good,” Coleman marvels. “I stayed awake for 36 hours following

Explain What I was Given'

the operation. I didn't want to go to sleep because I hadn't felt that good in many years. It was really the first time in so long that I felt alive. For me it was an immediate transition."

Today, that transition to normal life continues for Coleman. He is getting his body back in shape.

"I am back in the gym now and I have started training again," Wayne says. "The transplant has turned my life around, literally. I am in the process of writing my autobiography, and I hope to have it finished this summer. My life was spared and I was saved."

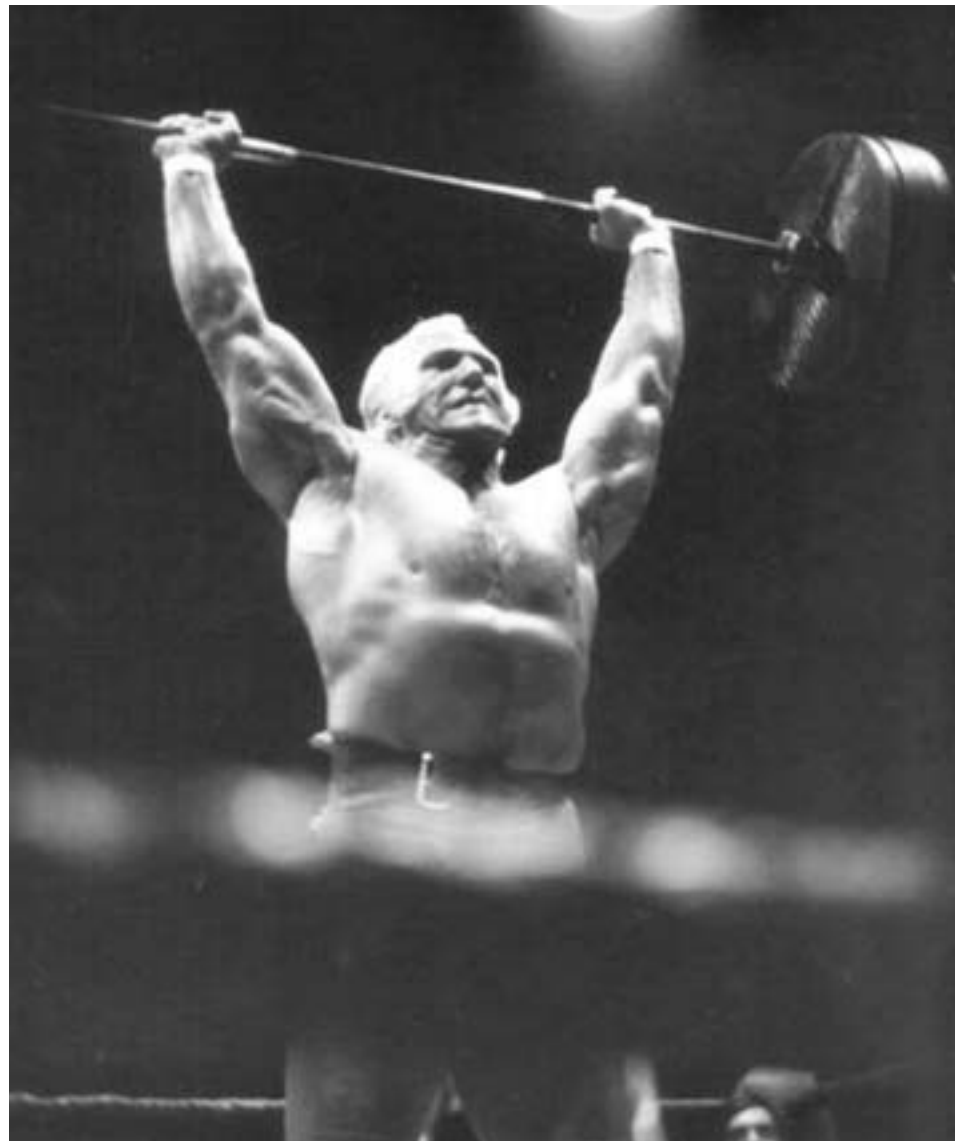
Wayne and Valerie recently wrote thank-you letters to the donor family. Wayne found it difficult to put his feelings on paper.

"Words can't express what I was given," he says. "The day of my transplant was really like a double-edged sword. The donor family lost a loved one and I was given life. The biggest Webster's dictionary in the world doesn't have the words to describe what it means to give life. I now have a new family, and part of their family lives on with me."

Wayne and Valerie have received many e-mails from fans across the country and around the world. Following the surgery, that outpouring of support was highlighted by a visit from the ex-governor of Minnesota, Jesse Ventura, a former wrestling

star and close personal friend.

"Jesse and his wife, Terry, came down to visit us," Valerie says. "Jesse is starting a new program on MSNBC. In the near future, we plan to join him on his program to spread the word about organ donation."



"Superstar" Billy Graham in his glory days – before his toughest battle

Brian's Story:

Never a Moment Without Being Thankful for Transplant



Brian Willasch, liver recipient, now happy and healthy.

When you're only 26 years old and yet your seriously diseased liver is destined to rob you of a future, you tend to be in denial.

Brian Willasch was entitled to such a reaction. The young Scottsdale, Ariz., man had previously lived a healthy lifestyle, except for some spirited games of football. He didn't smoke, refrained from alcohol and worked as a waiter to help with college expenses.

But life – and genetics – dealt him a tough card. Brian had developed Budd-Chiari syndrome, a rare disorder in which an obstruction of the liver's hepatic vein causes advanced cirrhosis and ascites (fluid in the abdominal cavity). For Brian, the news that that he could die without a liver transplant was an overwhelming prospect.

"This blew my mind. At this age, you feel invincible," admits Brian,

who had a hard time accepting the grim reality of his condition, even as his body deteriorated. By October 2000, the ascites had caused so much fluid to accumulate in his abdomen that he suffered constant back pain. Yet he had to avoid pain medications so as not to cause more liver damage. "I knew I was so sick, but I

toughed it out and avoided going to the emergency room," he confesses.

The big reality check came for Brian two days before Christmas in 2000, when he saw the words "transplant patient" on some of his paperwork at Mayo Clinic Hospital (MCH). Although his mother and sister were with him at the time, there was little to soften the blow that he was that sick and was listed for a liver transplant.

By Jan. 22 of the new year, Brian, severely weakened, was admitted to the Intensive Care Unit at MCH. "As time went on, they pretty much told me I had very little time left to live," Brian recalls somberly.

Fast forward to Feb. 12, 2001. David Mulligan, M.D., chair, Transplant Surgery at Mayo Clinic in Scottsdale, has entered Brian's hospital room to announce excitedly, "Start fasting, Brian. No food. Nothing. We

have a potential liver." Although Brian was warned there were no guarantees that the donor liver would be appropriate for his body, he relaxed. For some reason, fear did not overtake him – only excitement. "I had a big smile on my face and at 11:30 p.m. they were ready for me." Even the hospital housekeeper who tidied his room flashed him a smile and said, "I have a good feeling about this."

The last thing Brian recalls before surgery was Dr. Mulligan, an oversized radio by his side, asking him, "What kind of music do you like?" Brian recalls he enjoyed about 20 seconds of "great blues music" before going under the anesthesia.

The donor liver, from out of state, was an excellent match. Brian made an amazingly good recovery. He now attends college full-time, has a girlfriend and avoids playing soccer as part of his personal commitment to protect his precious new liver.

It was a special time for Brian in October 2002, when he volunteered to help serve food for his former employer, Michael's at the Citadel, for a special occasion. Michael's restaurant catered the Third Annual Celebration of Life reunion of Mayo Clinic transplant donors, recipients and family members at the Arizona Transplant House in Scottsdale.

"When I see myself each day, there's not a moment that goes by that I don't think about how thankful I am," says Brian.

Dr. Marek Mazur Joins Transplant Team



Marek Mazur, M.D.

New to the transplant team at Mayo Clinic in Scottsdale is Marek Mazur, M.D., who joins the Divisions of Nephrology and Transplant

Medicine. Dr. Mazur specializes in the medical aspects of kidney and pancreas transplantation.

Dr. Mazur and Raymond Heilman, M.D., head up the medical team for pancreas transplantation at the Transplant Center at Mayo Clinic Hospital.

Dr. Mazur, who earned his undergraduate degree at the University of Medical Sciences in Bydgoszcz, Poland, and his medical degree at Bydgoszcz University Hospital, is also Associate Professor of Medicine at Mayo Medical School. He completed fellowships in Nephrology and Transplantation Medicine at Boston University and Mayo Graduate School of Medicine, respectively.

In April – and all 12 Months

Remember Need for Donation

April is National Donate Life Month, a time to recognize and raise awareness of the critical need for organ donation. In previous years, the third week in April was designated as a week of recognition.

Now the entire month is devoted to the cause, highlighting the need for organ, tissue, marrow and blood donation.

As of March 14, 2003, approximately 81,000 Americans were on the waiting list for a transplant.

Following are some newly identified trends in organ donation and transplantation:

- Living donor kidney transplants now account for nearly 52 percent of all kidney donors. The number of living donor liver transplants has doubled since 1999.
- Biologically unrelated living donors increased tenfold between 1992 and 2001.
- Since 1996, deceased donors have been older, on average, than the general population. The percentage of transplant recipients over age 50 has grown steadily.

Source: United Network for Organ Sharing

MYTHS AND FACTS

Myth: If emergency room doctors know you're an organ donor, they won't work as hard to save you.

Fact: If you are admitted to the hospital, the number one priority is to save your life. Organ donation can only be considered if you die – and after your family has been consulted.

Myth: When you're waiting for a transplant, your financial or celebrity status is as important as your medical status.

Fact: When you are on the list for a transplant, what really counts is how ill you are, time spent waiting, blood type and other medical information.

Myth: My family will be charged for donating my organs.

Fact: There is no cost to the donor's family or estate for organ and tissue donation.

Outcome Statistics: Kidney Transplantation	
Total Transplants 6/99 - 12/31/02	134
Living Donor Transplants	95
Current 1-year graft survival rate	89.89%
Current 1-year patient survival rate	91.39%
Current 30-day patient survival rate	98.18%
Median length of hospitalization	5 days

Outcome Statistics: Liver Transplantation	
Total Transplants 6/99 - 12/31/02	131
Living Donor Transplants	18
Current 1-year graft survival rate	85.92%
Current 1-year patient survival rate	90.12%
Current 30-day patient survival rate	99.15%
Median length of hospitalization	7 days

Attention Physicians – 24-Hour Physician Referral Line: 1-800-344-6296 or 1-800-446-2279



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