## Mom gives slice of own liver to save her baby

Infant the youngest to undergo pioneering 'living-donor' operation

## **MONICA LAGANPARSAD**

INE-MONTH-OLD Connor Mollison plays with the multiple tubes connected to his tiny body as he lies in his hospital bed. It will be years before he knows and understands the pioneering surgery he underwent a week ago.

But as his family and the surgeon who performed the lifesaving liver transplant know, the operation brought hope not only to Connor, but also to others waiting for an organ donor.

Connor is the youngest patient to have undergone a "living-donor" transplant at the Donald Gordon Medical Centre at the University of the Witwatersrand. Connor's new liver was grafted from his mother, 37-year-old Annabel Mollison.

The procedure was pioneered in the US in the late 1980s and is now widely used as an alternative to orthodox liver transplants.

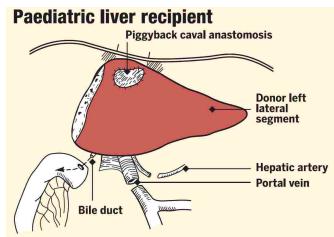
South African surgeon Dr Jean Botha spent more than a decade training and working at the University of Nebraska in Omaha before returning to the medical centre last year to join its transplant team. Since the living-donor programme launched in March, three such procedures have been performed. Connor is the latest recipient.

Botha hopes the surgeries will motivate others to consider the option, because it would take significant pressure off the donor list. The average waiting time for a person to receive a liver from a donor who has died is between three and six months.

Botha said: "The liver is the only organ that regenerates. You can take a piece [from an adult] and put that into the child. The liver will grow with the child and the part you took from the adult will grow back. It doesn't grow like a lizard's tail — the piece you leave behind just gets bigger."

The medical centre has done 240 "regular" liver transplants, 40 of which were for children.

Annabel Mollison, a doctor living in Durban, said Connor and his



**Donor left lateral segment:** The bit of liver that is removed from living donor. **Piggyback caval anastomosis:** Where one of the veins from the donor liver is joined to the main blood vessel carrying blood back to the heart.

**Hepatic artery:** Carries oxygenated blood to the liver, this blood vessel has to be joined up to the recipient hepatic artery.

**Portal vein:** Carries blood from the intestines to the liver. This blood vessel has to be joined up to the recipient portal vein.

**Bile duct:** Transports bile made in the liver into the intestines where it helps digest food.

Graphic: RUBY-GAY/MATTHYS MOSS

twin brother, Keegan, were born prematurely. At three months, Connor developed jaundice.

"He was getting a big tummy and going yellow. We took him to the hospital and doctors thought it was a blocked gall bladder," she said.

The liver will grow with the child and the part taken from the adult will grow back

On Christmas Eve, Connor had a three-hour operation, known as a Kasai procedure, in which surgeons tried to improve the baby's bile drainage.

Connor initially showed some improvement, but in February "the wheels fell off completely" and he

developed bile obstruction, said Mollison. "Doctors in Durban did two small operations, but he had recurring infections and has been in hospital since February."

Mollison said her sons had never been in the same room and had not seen each other since Connor was hospitalised.

"Keegan wasn't allowed in the room because of the strict precautions. We hope we can take Connor home soon," she said. Mollison praised the living-

Mollison praised the living-donor procedure. "The thought of having your bags packed and waiting for someone else's family member to die . . . I don't like that. The procedure is amazing. I can't believe how good he looks," she said.

Botha said the procedure meant that people in need of a liver transplant might no longer need to wait for a donor organ.

"Often death occurs while waiting for organs," he added.

## Easing the burden of transplants

PROFESSOR Jean Botha studied at the University of the Witwatersrand's medical school before moving to Cape Town to complete his surgical training. But the lack of liver transplants to hone his skills frustrated the young doctor, who moved to the US to train.

He returned to South Africa last year, armed with training in paediatric liver transplants. As part of the only surgical team in South Africa — at Wits University's Donald Gordon Medical Centre — that does "live liver transplants", he wants to ease the burden on organ transplants.

"We have a huge burden of disease in this country that is right now unaddressed in both people with medical care and indigent patients. This opportunity is available for all our patients to get transplants and avoid death while waiting for a [donor]," Botha said.

The unit has completed 240 liver transplants — 200 adults and 40 children. The youngest recipient was nine months and the oldest 72.

He said the main cause of liver failure in children was a condition called biliary atresia. "This is when children are born with bile ducts that don't develop. So they are born with jaundice and progressively get more jaundice and eventually die from cirrhosis within the first two years if nothing is done about it."

A conventional liver transplant takes between four and five hours, but the procedure of transplanting a piece of liver from a live donor takes a day to complete. — Monica Laganparsad



THANKS MUM: Connor, with his mother Annabel Mollison, recuperates at the Donald Gordon Medical Centre in Parktown, Johannesburg, after his liver surgery

Picture: KEVIN SUTHERLAND