

How surgical team saved boy's hand

8-year-old's injury looked like worst-case scenario, but surgeons were up to the job

BY ERROL KIONG
HEALTH REPORTER

THE Northland boy whose hand was wrenched off by a rope had sustained the worst possible injury to repair, say surgeons.

"If I was to come out of the operation with a thumb I would have been happy. The fact that he got two extra fingers as well is an absolute bonus," said lead surgeon Murray Beagley.

The boy is recovering at Auckland's Middlemore Hospital following a marathon 14-hour procedure last Saturday to piece together his right hand after it had been torn off from just below the thumb to the little finger in an accident at Haines House Haulage in Whangarei.

The 8-year-old had been playing with a piece of rope in his father's truck. As his father drove the truck out of the yard, the rest of the rope appeared to have caught round a rear wheel, tightening around the boy's hand and wrenching it off.

The wrenching effect also tore the tendons away from their connecting muscle in the forearm.

Haines sales manager Nick Toth said, within minutes, the father had retrieved the severed portion, bandaged the remainder of the hand and rushed the boy to the yard's office.

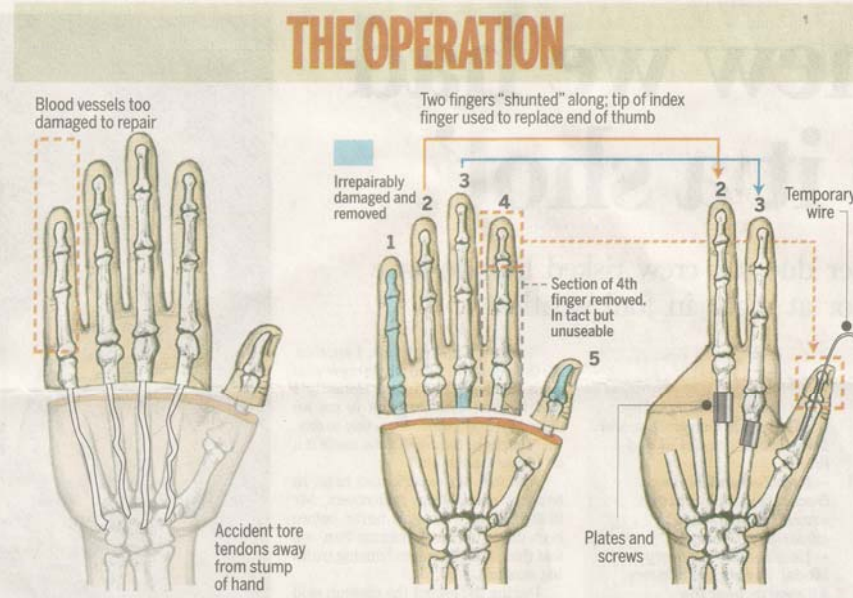
"He was a brave little boy. He was crying but he was really good."

The father drove his son to Whangarei Hospital, just minutes away.

Toth said the practice of having children at the yard was not encouraged but sometimes parents had no choice, particularly during school holidays. The boy's father had followed all safety practices, he said.

Hand injuries involving a clean cut, such as with a machete, typically have a 95 to 98 per cent chance of the severed part surviving.

An avulsion injury, however, has a "50-50" survival rate. Most common are ring finger injuries when rings get caught on something, he said. In these injuries, the blood vessels snap "like an elastic cord", making the reconnection of blood supply to the severed part more difficult.



Source: Dr Murray Beagley, HERALD GRAPHIC/GUY BODI

Middlemore plastic surgeon Richard Wong was on call when he was told of the accident on Friday. As the admitting surgeon, he worked to clean the wound and to define the extent of the injury.

He also assembled the surgical team, which included himself, Dr Beagley, Starship orthopaedic surgeon Terri Bidwell, Middlemore plastic surgeon Amber Moazzam, and advanced plastics surgery trainee Sarah Hulme, with three specialist anaesthetists, and multiple nursing teams.

Dr Wong She also looked at what had been done in cases like this.

"The reality is there is not a lot out there on this ... His was almost the worst-case scenario."

Dr Beagley's main role was in re-establishing blood supply to the severed hand.

Two arteries and two veins were reconnected using a needle half the thickness of an eyelash.

The thumb and little finger were so badly damaged they were amputated, but their tendons were "banked" under the skin of the boy's abdomen for future use.

The remaining three fingers were moved along one to give an opposing grip. Dr Beagley is waiting for skin to heal completely before going back to graft the nerves and reattach the tendons.

The procedure, if successful, will enable the boy to grip and hold everyday items like cutlery or a pen. "Hopefully he'll be able to grip the handlebars of his bike, or drive a car later in life."

additional reporting,
Herald On Sunday



TOP GUN: Dr Murray Beagley led the surgical team. PICTURE / BRETT PHIBBS