The Nelson Mail - Taking heart

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Cardiologist Nick Fisher speaks with patient Des Molloy while performing a cardiac procedure at Nelson Hospital, with the assistance of Karen Hill, left, and Jane Besley (obscured).

He had never been a couch potato. Never smoked. Exercised a bit. Didn't eat too badly.

His father had a bit of angina in his old age, but still lived into his 80s. He'd visited the doctor for his 60th birthday check-up, and everything was fine. But in January 2010, Pohara's Des Molloy had a heart attack.

"It gave me a bit of a fright," he remembers, almost a year later. "Prior to that, you half-heartedly think you eat well, and you think, `oh, I just need to exercise a bit more'. But give yourself a heart attack and you're sitting on the bed thinking, `s..., this might be it'."

After a year of tests and medication, in about 10 minutes Mr Molloy will be on the operating table: naked, groin exposed, skin shaved, with a wire threaded into his leg and snaking around to his heart. But he can still manage a joke.

"I'm a tame patient, but they've got their stab-proof vests on," he says from his hospital bed, looking at the nurses donning lead-lined aprons in preparation for his procedure. "It's serious stuff when you look at all that."

Inside the catheter lab, it's Christmas carols on the stereo as Mr Molloy lies on the table. Patients are normally allowed to choose what music they'd like, "but not this week", a nurse jokes.

In a fetching leopard-print lead apron, Nelson Hospital's interventional cardiologist Nick Fisher explains the procedure. At the moment, Mr Molloy's narrowed artery (stenosis) is something like a garden hose with a kink in it, and during exercise his heart isn't working as it should.

Dr Fisher will slice into his patient's femoral artery at the top of his leg, slide a plastic tube up the artery and insert a guide wire, which acts like a little monorail. He'll then slide a balloon catheter over the wire, carrying a pre-mounted stent like a tiny roll of chicken wire.

At the point where the artery narrows, the balloon will be gently inflated, crushing the fatty deposits and expanding the stent. Once the artery is opened up again, the blood will be able to flow – and carry oxygen – much better, and reduce Mr Molloy's chest pain.

If you're going to have a heart attack, have it in Nelson, the cath lab nurses say. Over the past few years, Dr Fisher and Andrew Hamer have built their own cardiology department at Nelson Marlborough District Health Board, and it's soon to expand again.

Advertisements have just closed for a new interventional cardiologist like Dr Fisher, and there will be a new build and a new heart-failure specialist, Tammy Pegg, beginning in June.

Dr Pegg has a PhD from Oxford University – and she also just happens to be Dr Fisher's wife. "That's how I managed to get her here," he says.

Dr Fisher is looking forward to the changes, which he hopes will mean heart operations can be performed five days a week.

"At the moment you could come in on Monday night with your heart attack, and you'd have to wait until Wednesday before we can do anything about it and you're sitting in a hospital bed. If we can do that on a Tuesday, you're better [off] because you're seen quicker, and the hospital's happier because you've saved a night in hospital. It's a win-win situation."

Part of the expansion is to prevent what he calls "postcode healthcare" across the top of the south, and the "inefficient" way patients are operated on.

"If you live in Picton you shouldn't get a different type of service than if you lived in Collingwood St," he says.

"That currently happens because if you've got a heart problem in Picton you don't necessarily get seen by a cardiologist. When admitted, you should be seen by a cardiologist from point of admission, regardless of time of day and regardless of location.

"If Andrew Hamer's not here, all his operation lists get cancelled because I can't cover him, because there's only two of us. So the hospital's on-off, on-off. Sometimes you have a whole team ready to operate but can't do anything because the consultant's away.

"We're hoping to get to the stage where patients who get admitted to ED in Blenheim don't have to go through the hospital system, and they might be able to be flown straight here."

All very well, but where's the money coming from?

"Sadly, most of it has to come from within [existing budgets]," he says. "There isn't a lot more money. That's one of the things we do struggle with – we're just trying to shovel it around a little bit and have better management.

He also wants more responsibility over where money is spent.

"One of the big buzzwords around is clinical governance, and that means giving people like me more control over running our department. There's a lot of soundbites coming out of the hospital but I don't yet have my own budget.

"So, although I can decide whether I want to operate in the morning or the afternoon, I can't order myself a pencil sharpener.

"We're hoping, and pushing, to get our own budget. We've made a lot of savings in our own department, but we don't get to feel the appreciation of those savings.

"It will be a very good incentive for departments if they can see the fruits of their own efficiencies."

From behind the desk, radiographer Sarah Gerrard monitors the patients' X-rays as Dr Fisher manipulates the wires and tubes inside their chests. Patients are usually given a little sedation beforehand, but they're always alert and conscious.

There's the potential for them to get chest pain during the procedure, so the team needs to know quite quickly if they're feeling something going on.

The imaging machines are large, noisy and close to the body, and the table moves – all of which can be quite overwhelming. Ms Gerrard says patients often get scared.

"They [the surgical team] just try and talk them through it," she says. "I think the thought of it is often so much worse than the actual procedure."

Mr Molloy receives a local anaesthetic and the incision is made. When the dye is injected, Ms Gerrard watches the X-ray images as they appear. One of her jobs is to measure the stenoses to let Dr Fisher know which size stent he needs.

"Once it's deployed, you can't take it out, so it's important he gets the right size first time."

She explains that after the stent has been expanded, Dr Fisher will slide another balloon over the guide wire and inflate it to make sure the stent is deployed properly all the way along. "Sometimes, if the plaque inside is really calcified and really rock-hard, it takes a lot of ballooning up and down, just to break it."

There are no nerves inside a blood vessel, so Mr Molloy can't feel Dr Fisher plumbing around inside his heart. It all seems quite calm, and there's only a few spurts of blood on the blue surgical drapes.

"You expect it to be like it is on ER or something, with everyone running around yelling, but it's not really," Ms Gerrard says. "It can get really, really tense sometimes. Yesterday afternoon, our last patient decided to have a mild heart attack on the table."

"And we're done!" Dr Fisher says. "You're twice as valuable now, Des."

"A nice quick one," Ms Gerrard says.

Done privately, it would have cost $18,000.

It's a quick turnaround. The next patient, a 49-year-old man with very high cholesterol, is waiting out in the corridor. Although the procedure is common, it can still be dangerous.

"People die," Dr Fisher says afterward. "You're operating to millimetres inside a beating heart, and if it goes wrong the patient will have a heart attack or could die. It's one of the rewards of our job that we can make people so sick better, but the downside is that [sometimes] I to go to work and kill someone, which is pretty sobering at the end of the day."

It can be even more stressful with a non-acute patient like Mr Molloy.

"If this chap was flown in by helicopter and he was dying, and I operate and he dies, then I'm just trying to stop him from dying. But now this bloke's just getting angina and if I bugger it up, maybe I could have just left him with angina. So I actually find these more stressful in some instances because you really can cock it up."

Dr Fisher does about 300 angioplasties a year, and he's been doing them for about 15 years. The complication rate is about 1 per cent; the mortality rate 0.1 per cent. "Truthfully, we don't hit that. But that's the international scale."

However, Dr Fisher warns that angioplasty – what he calls the "glamour" procedure – isn't stopping the disease process. It's just putting a hold on it temporarily. The real solutions come down to lifestyle – and drugs.

Cholesterol-lowering statins have revolutionised treatment of heart disease. "They're safer than aspirin and are probably more important than I am," he says. "What people don't realise is that coronary artery disease starts [at] about nine years old and progresses throughout your life. You can't suddenly decide to mend your ways at 55."

But with the Heart Foundation calculating that a New Zealander dies every 90 minutes of heart disease, which is still the leading cause of death in New Zealand, accounting for 40 per cent of deaths annually – the medicine is only improving.

Mr Molloy's stent is a fairly new development in that it will ooze a tissue-growth-inhibiting drug over several months, preventing the artery scarring too much and narrowing again. If he'd had his operation in a few years, he might have got one designed to dissolve inside his body. If he had it done next year, it may have been done through his arm, reducing his stay in hospital to just a few hours.

In the corridor, Mr Molloy has rung his wife and had a quick chat to reassure her.

"She can make it through the Christmas shopping now," he says.

He's a bit woozy and is wheeled off quickly to spend the rest of the night in hospital.

A couple of weeks later, just after New Year – 12 months since his heart attack – he tells me that since the procedure his exercise-induced angina has cleared up slightly, though he's been taking it easy. He felt "a bit pummelled" after he first left hospital, but nothing too bad.

"I'm confident I'm in a better place than I was before the operation," he says. "You can see from the picture they show you. You've got a narrowing that's all squeezed up on one and in the next picture it's all nice and open so there's more blood going around, more oxygen and you won't run out of puff the same. It's pretty amazing, really. I think it's magical."

But it wasn't just the stent that's made him feel better. In the 11 months between his heart attack and the angioplasty, Mr Molloy changed his diet dramatically, dropping 20kg. His back pain has cleared up and he doesn't crave sweet or fried food any more. Well, not much.

"I eat fairly normally, but very little sweet stuff, avoiding the dairy, fats and the bacon – all the stuff I'm salivating over just thinking about," he says. "I really miss cheese."

It was easy to change though; the heart attack made him "scared stiff".

"I've talked to people who've had half a dozen heart attacks and they're still overweight and you think, `Whoa, really?' I'll wait till I'm old enough – maybe 90. Then I'll say, `Right. Let's have some pork chops'."

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