FRONTIER

THE MAGAZINE OF MACQUARIE UNIVERSITY HOSPITAL SPRING 2014





Advances In

MND

Understanding



Expert Team Treats Rare Ear Tumour New Leads To Pain Relief

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Innovative Surgery Spares Aortic Valve





WELCOME TO MACQUARIE UNIVERSITY HOSPITAL

Welcome to the 2014 mid-year edition of our Frontier Magazine. Once again our "Frontier" is showcasing some of the ground breaking medical procedures, research and teaching happening at our extraordinary hospital.

It is an exciting time for MUH, as the broader University increases its focus in the area of health. At the most recent University Council meeting, Macquarie University approved the establishment of a Faculty of Medicine and Health Sciences which we discuss in greater detail in the following pages. I'd like to take this opportunity to congratulate Professor Patrick McNeil on his appointment as Executive Dean of the new faculty.

With the institutional commitment from our parent organisation – Macquarie University – we are moving closer to fulfilling our vision of an integrated academic health service, where the teaching and research happening here will

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Frontier

Macquarie University Hospital Please direct all editorial enguiries to Marketing Manager (Editor):

Katherine Filippi 02 9812 3099 katherine.filippi@muh.org.au Writer: Andrea Lewis Designer: Kasi Litis Project Manager: Bernadette Robinson

Photographers: Paul Wright Photography

Macquarie University Hospital 3 Technology Place Macquarie University NSW 2109 www.muh.org.au





ultimately make a very real and significant contribution to the future of Australian health.

As well as increasing our research and teaching capabilities, patient services continue to strengthen. In February of this year we undertook our second patient satisfaction survey and I am delighted to report that our 2014 results improved upon the already excellent results obtained in 2012.

Patient satisfaction is perhaps the most important measure of our success. A positive patient stay is dependent on the countless members of our team giving their all. I'd like to congratulate the entire MUH team on this outstanding achievement – from our catering to administration staff, medical experts to allied health professionals and everyone in between.

Carol Bryant

CEO, Macquarie University Hospital

EXPERT TEAM TREATS RARE EAR TUMOUR

WITH THE ORL HEAD AND NECK DEPARTMENT AT THE HOSPITAL HAVING GROWN RAPIDLY OVER THE PAST YEAR, MORE THAN 20 SURGEONS NOW OFFER PATIENTS A FULL SUITE OF SERVICES – FROM ROUTINE TO COMPLEX PROCEDURES.

fter experiencing a pulsating sound in her left ear along with hearing loss – her symptoms growing progressively worse over the past year – Catarina McLeay was referred by her GP to Associate Professor Nirmal Patel, an otology and neurotology surgeon, who is part of the ORL/Head and Neck team at Macquarie University Hospital.

Examination revealed a growth in the ear, with CT and MRI scans confirming a rare neuro-endocrine tumour of the middle ear, known as a paraganglioma. Almost always benign, paragangliomas are able to develop at various sites in the body, usually occurring in the abdomen, with only three per cent appearing in the head and neck.

"About one in a million people develop a paraganglioma," said Associate Professor Patel, who is also director of the Kolling Deafness Research Centre at Macquarie University and a senior clinical lecturer at the University of Sydney. "Sydney surgeons might see five to ten of these a year, so they do require a specialised surgical team for treatment.

"In the case of Catarina, the tumour was located in an awkward spot, bringing with it the potential to interfere with crucial structures – the facial nerve, hearing organs, carotid artery and jugular vein, in particular.

"If left too long, these and other structures would become compromised, requiring a larger operation. The decision was made to remove the mass as soon as possible."

Using the state-of-the-art high-definition microscope, endoscopic ear equipment and facial nerve monitoring systems in which Macquarie University Hospital has invested, Catarina underwent a surgical resection in February this year.

Because paragangliomas are highly vascular tumours, a patient can require blood transfusion after the procedure and an angiogram that embolises vessels prior to surgery – necessitating the need for a highly skilled team, which the hospital has available. In this case, Catarina opted not to undergo embollisation.

Her team of doctors included Associate Professor Nirmal Patel and anaesthetist Dr Kirsten Morgan.

"We made a routine cut behind the ear, exposing the tumour in all aspects – above, behind and below," explained Associate Professor Patel. "We were able to remove all of the tumour and preserve hearing – the endoscope allowing us to view the area in front of the facial nerve to ensure all the tumour was removed.

"With high-definition imaging and advanced access, we were able to achieve a 'complete cure' for the patient. Catarina went home on the day of surgery."

Whilst Catarina still feels some instability in her ear as it heals, she was able to return to work only two and a half weeks after the operation. She will consider some reconstructive surgery, at a later stage.

"I was very happy with Macquarie University Hospital," said Catarina. "Staff were wonderful, and I had the best, most comfortable stay I've ever had in any hospital – short as it was. Associate Professor Patel is a wonderful doctor. From the first visit, I felt informed and very calm about the procedures and its outcomes."



Associate Professor Nirmal Patel