Philanthropist's $500,000 microscope helps to deliver world-class treatment to Flinders hospital patients

The brains trust show off skills in Theatre 8

IN Theatre 8 at Flinders Medical Centre the lights go dim and it is showtime. In a patient's exposed brain, a tumour the size of an egg lights up like a Las Vegas neon sign.

A powder the patient has swallowed has made its way into the tumour and slowly turned it fluorescent under a new $500,000 neurosurgical microscope.

It provides a handy guide for neurosurgeon Dr Santosh Poonnoose as he ever-so-delicately prepares to remove the mass of dangerous tissue.

A clumsy bump could end speech or movement, maybe life. With the brain exposed, Dr Poonnoose is at the deep end of surgery. He and colleagues proceed with caution.

It is mid-morning and we are at the business part of a procedure that began at dawn and will continue until after lunch, with a dozen or so people in the FMC theatre.

They range from neurosurgeons, neurologists and nurses to "neuro nerds" – the good-humoured nickname for highly skilled technician wizards operating a range of hi-tech machinery.

The wizards today actually have magic wands – but more of that in a minute.

The patient is 51-year-old Graham Goss, of Seacliff, who has agreed to allow the *Sunday Mail* into Theatre 8 to witness his operation.

Mr Goss is principal planner for the River Murray in the Department of Environment, Water and Nature Resources.

An aching shoulder in April last year, followed by convulsions, resulted in him seeking help. An MRI scan at FMC revealed the tumour.

He kept his brain tumour secret from sons Zane, 13, and Kade, 11. His wife, Sharon, shouldered a fair bit of the worry.

Mr Goss has allowed this rare access as a way of thanking philanthropist David Gunn who has donated a $500,000 neurosurgical microscope through the Muriel Gunn Medical Research Trust Fund.

Mr Gunn has made major donations to medical research including close to $2 million to the SA Health and Medical Research Institute. The fund was set up in the memory of Mr Gunn's wife who died from brain cancer at 44.

As big as a petrol bowser, with multiple eyepieces, the microscope allows surgeons pinpoint accurate insight into the brain. Mr Goss has a glioma in his brain. It has interrupted electrical patterns in nearby brain cells, causing epileptic convulsions.

So the plan is to identify and isolate the tumour, plus the dodgy nearby brain cells, and take them out without mucking up the rest of the brain function.

Mr Goss has had an MRI which identifies the tumour. While this is great as a mud map, when Dr Poonnoose is fossicking in the brain he needs more guidance than just