



# RESEARCH FOR TOUGH CHOICES

Scholar recipient Dr Cherry Koh looks at the hard decisions patients must make

Understanding decision making surrounding recurrent rectal cancer is the subject of PhD research now being conducted by NSW colorectal surgeon Dr Cherry Koh.

Dr Koh is a 2013 recipient of a Foundation for Surgery Scholarship and is undertaking her research through the Surgical Outcomes Research Centre at the Royal Prince Alfred (RPA) Hospital in Sydney. The PhD project examines decision making from a patient and clinician, as well as societal, perspective.

“Patients with recurrent cancers in the pelvis often suffer from intractable symptoms especially pain. It is also not uncommon for patients to experience bleeding, bowel obstruction or fistulation as the tumour continues to grow within the confined bony pelvis.” Dr Koh said.

“The only option for cure is to perform a radical procedure (also known as pelvic exenteration) that removes all organs within the pelvis that are involved in the recurrent cancer.

“Patients face challenging decision making as they weigh up survival versus the trades-offs from surgery such as the need for a colostomy or urostomy bag, sexual dysfunction and the possibility of lower limb problems from the need to remove the sacrum.”

First used to treat recurrent cervical cancer, exenterative surgery can take from seven to 20 hours to complete and involves a large surgical team including colorectal, orthopaedic, vascular, urology and plastic surgeons.

Dr Koh said colorectal surgeons were now using exenterative surgery to treat

advanced bowel and rectal cancers with the RPA conducting about 50 each year.

She said that the average survival without surgery is about 12 months and that chemo-radiation may prolong survival to 18 months, but is not curative.

“The process is analogous to applying the brakes on the car, but the wheels never stop spinning,” Dr Koh said. “Eventually, the wheels start accelerating again.

“However, with surgery, up to 50 per cent of patients were still alive at five years.

“In many parts of the world including Australia, most patients would be palliated, but a small number of hospitals including the RPA Hospital in Sydney offer pelvic exenteration.”

Dr Koh said that patients were carefully selected for such an intervention.

“They have to be fit and well to undergo such major surgery,” she said.

“Even after discharge, patients often require prolonged rehabilitation and will need ongoing support to fully recover.”

Dr Koh said it was not uncommon for patients to underestimate the magnitude of the operation.

She said the entire decision-making process involved more than just the patient and included the surgeon as the clinician offering the procedure and the society as the funding body for such procedures.

Both aspects are also incorporated into her PhD which examines how clinicians make decisions about patient selection and the cost effectiveness of such surgery.

Dr Koh is conducting that research through the University of Sydney under the supervision of Professor Michael Solomon, Professor Glenn Salkeld and Professor Jane Young.

To gather the data required, she is interviewing patients and clinicians, but is also analysing Quality-Adjusted Life-Year (QALY) data, a statistical measurement of disease burden.

“I want to know how the surgeon decides who is an appropriate candidate for exenterative surgery, why some patients jump at the option and others decline it and if such expensive surgery is in the social interest given tight budget environments,” she said.

“About 5000 people get rectal cancer in Australia each year and of those, between 250 and 500 patients will have recurrent cancer and of those patients about half have inoperable tumours.

“Of the patients with potentially operable tumours, it is not clear how patients make decisions about surgery and I am in the process of interviewing patients to understand how patients make treatment decisions.

“So far I have conducted 30 patient interviews and I am hoping to get that up to 50.”

Before taking up her role at the RPA, Dr Koh had a Fellowship at the John Radcliffe Hospital in Oxford where she worked in the Inflammatory Bowel Disease (IBD) unit as well as the Oxford Pelvic Floor Unit. While there, she also gained skills in transanal endoscopic microsurgery and the management of complicated re-operative surgery for IBD.

She said she began conducting exenterative surgery after returning to Sydney.

“RPA has had a long history with pelvic exenteration starting with Professor Anthony Evers,” she said

“Professor Evers has conducted quite a number of these procedures during his career in RPA and Professor Solomon then began to take an interest and since then, he has pioneered certain techniques used in pelvic exenteration, written book chapters and is frequently an invited lecturer on this subject around the world.”

## Managing expectations

Dr Koh said that while the surgery was radical and morbid, it does save lives.

The most important aspect was managing patient expectations.

“The quality of life of the patients who have this procedure is directly dependent on their expectations,” she said.

“What Professor Jane Young and Professor Solomon have found so far is that such major surgery causes a sharp dip in patients’ quality of life immediately after surgery, but as patients recover, their quality of life returns to their baseline quality of life and even overtakes that of patients with recurrent cancer, but who do not undergo surgery.

“So, this is not just about keeping people alive at all costs; patients actually return to their usual quality of life.

“There are some within the medical community who are sceptical about this surgical treatment and believe it is too invasive and too costly and they have the right to that opinion.

“It is a very interesting area of research because no-one has looked closely at this emerging treatment option or analysed the cost-benefit aspects in terms of medical funding.”

Dr Koh thanked the College for its support and the funding attached to the Foundation for Surgery Scholarship.

“It was an honour to receive it because it represents recognition by the RACS for not just my research, but for the work being done by academic surgeons in both Australia and New Zealand,” she said.

Dr Koh has also been awarded the Nataras Fellowship in Colorectal Surgery through the University of Sydney.

*With Karen Murphy*



## DR KOH'S SCHOLARSHIPS 2013

AWARDED RACS FOUNDATION FOR SURGERY SCHOLARSHIP

### 2011

AWARDED ACPGBI TRAVELLING FELLOWSHIP

Travelling Fellow to:

- St Mark's Hospital, London, United Kingdom
- Basingstoke Hospital, United Kingdom
- Leeds General Infirmary, Leeds, United Kingdom
- University Hospital, Leuven, Belgium

### 2010

AWARDED BEST TEACHING AWARD BY ROYAL PRINCE ALFRED HOSPITAL SYDNEY

### 2009

AWARDED MITCHELL NOTARAS COLORECTAL FELLOWSHIP By CSSA (Colorectal Surgical Society of Australia)

### 2007

MASTER OF SURGERY Awarded University of Sydney Colorectal Scholarship Awarded Brian Smith Foundation Scholarship

### 2005

RIGID SIGMOIDOSCOPY STUDY Awarded Selwyn Family Foundation Scholarship