

Chairman's Report

Professor Adrian Polglase

Confocal Endo Colonoscopy

An interesting and exciting new colonoscope has been developed through a partnership between Optiscan (an Australian biotechnology company) and Pentax (a major Japan producer of optical instruments) which allows magnification of the lining of the bowel (and other parts of the gut) by 1000 fold. Glandular and cellular detail can then be visualised by the endoscopist or the images can be digitally down loaded to a remote site pathologist for a more detailed assessment. It may lead to early and more accurate diagnosis of pathological and accurate targeting of biopsy sites. This can be difficult or impossible with current technology.

Our department has undertaken the initial invivo clinical assessment of confocal endo colonoscopy and to date 30 patients have been examined in the pilot study. Diagrams and photographic images are shown on page five.

Confocal endo colonoscopy stimulated great interest at the recent Digestive Diseases Week in Orlando, Florida. In addition at a new technology conference in Tokyo last month a number of European and United States medical schools showed great interest joining with us in further evaluation of this interesting medical advance.

INSIDE THIS ISSUE

1. Chairman's Report
2. Diet and Aspirin
3. "Tackling Bowel Cancer"
4. Healthy Living
5. Clinical Research Update
6. – 7. Clinical Research Activities

Bowel Cancer Pilot Screening Program

This Federal Government initiative was launched in Nov 2002. The Bowel Cancer Screening Pilot Program is designed to assess the feasibility, acceptability and cost effectiveness of a bowel cancer-screening program in Australia.

The pilot study is aimed at reducing the number of Australians who die each year of bowel cancer. Up to 69,000 people aged between 55 – 74 years on 1 Jan 2003 living in three pilot sites will be invited to participate in the study. The Australian sites are Mackay, Southern and Western areas of Adelaide and North East Valley area of Melbourne postcodes 3070, 3071, 3078, 3079, 3081, 3083, 3084, 3085, 3087, 3088.

The pilot study involves participants using a faecal occult blood test (FOBT) in the privacy of their own home and mailing the test back to a pathology lab. The FOBT is a simple to use test that is designed to detect hidden blood in bowel motions. This may lead to a 30% improvement in cure rates for bowel cancer.

For more information on the Bowel Cancer Screening Pilot Program

www.cancerscreening.gov.au



Western diet and the risk of colon cancer.

This prospective study followed 76 402 women aged 38 to 63 years without a history of cancer in 1984 for 12 years to look at dietary patterns and colon cancer.

During the 12 year followup researchers identified a 445 cases of colon cancer and 101 cases of rectal cancer.

Two major dietary patterns were identified: "prudent" and "western". The prudent diet consists mainly of fruit, vegetables, fish and wholegrains whereas the western diet was rich in red and processed meats, sweets, desserts, French fries, and refined grains. Cooking of red meat could be one explanation for the link between the "western" diet and colon disease since high temperatures could generate carcinogenic nitrosamines. Further, the increased intake of refined grains may provide an additional risk factor in the western diet.

The study concluded that there was a positive association between the "Western" diet and the risk of colon cancer.

Reference: Arch Intern Med. 2003;163:261

MEDICAL STUDENTS

Monash University final year medical students commenced their rotations in March this year and we will have five six-week rotations this year.

The students are offered selectives in: General Medicine, Surgery, ICU/Acute Medicine and Oncology/Palliative.

Selectives are practical, clinical 6 week learning modules designed to provide an increased opportunity for improving clinical skills and active involvement in patient management.

Dr Michelle Levinson a general physician has joined Mr Simon Woods, Clinical Dean in coordinating selectives this year. Dr Felicity Hawker, Director Of Intensive Care coordinates the ICU selective and Associate Professor Gary Richardson, Director of Oncology coordinates the Oncology selective.

Students are exposed to the concept of holistic patient care. They are expected to follow their patients through the entire episode of care including visits to various departments to obtain maximum clinical experience.

Some aspirin a day

A study published in the New England Journal of Medicine¹ found that 37% fewer patients taking a standard dose of aspirin – developed adenomas than a control group. In the randomised, double blind trial patients were monitored for three months to ensure it was safe for them to take aspirin, 635 were randomly assigned to either the aspirin or placebo group. All of the subjects, aged between 30 & 80 had been treated for colon or rectal cancer, but were understood to be at low risk of the disease recurring. Just over a year after randomisation, 517 patients had undergone at least one colonoscopy, with 17 per cent of patients in the aspirin group developing one or more adenomatous polyp, compared with 27 per cent of those in the placebo group.

Whilst studies such as above have shown that aspirin is associated with a reduced risk of bowel cancer issues about the regularity of use and amount of aspirin on people at high risk of bowel cancer remain to be resolved.

In August 2002 the Cancer Council Victoria announced funding for research into aspirin in people at risk of hereditary colorectal cancer. Headed by Professor Macrae, gastroenterologist and Head of the familial bowel cancer clinic at the Royal Melbourne Hospital the 3 year study involves about 120 Australians with one of nine cancers pre-disposing genes or family histories of cancer indicating a high level of risk as part of an international randomised clinical trial of twelve hundred people who are using aspirin and/or resistant starch.

Reference:

1. NEJM 2003;348:883-899

"Tackling Bowel Cancer"

an initiative of the
Cabrini Monash University Academic Surgical Department and St Kilda Football Club.

www.tacklingbowelcancer.com

A Community awareness seminar was held on the 16th June at the Beth Weizmann Community Centre in Caulfield. The seminar was presented by the Department in conjunction with Jewish Care and supported by the Besen Family Foundation.

The seminar was titled, "Tackling Bowel Cancer in the Ashkenazi Jewish Community". Ashkenazim are more likely than the rest of the community to develop bowel cancer, perhaps because of dietary factors but 10% have a gene (I1307K) which predisposes to bowel cancer. The potential major protective benefits against bowel cancer from screening and genetic testing were addressed.

Speakers included, Professor Gabriel Kune, Emeritus Professor of Surgery who moderated the evening. Professor Adrian Polglase, Professor of Surgery, Cabrini Hospital, Dr Henry Debinski, Gastroenterologist, Cabrini Hospital. Rabbi Simcha Cohen, Chief Rabbi Mizrahi, Melbourne and Professor Loane Skene, Professor and Associate Dean Faculty of Law, University of Melbourne. Of particular interest were Rabbi Cohen and Professor Skene who addressed ethical and legal aspects of genetic testing.

The night proved to be a great success with about eighty people in attendance. There were many stimulating and challenging questions from the audience, in particular directed towards the ethical and legal issues associated with genetic testing.

Healthy Living



Physical activity is an important factor in reducing your risk of some cancers. For bowel cancer, physical activity speeds up the digestive process and shortens the exposure of the bowel lining to harmful substances. Exercise also helps reduce the cancer risk by helping to maintain a healthy weight.

Studies have shown that no matter when you start, exercise improves health.

Apart from reducing your risk of bowel cancer regular physical activity reduces your risk of breast and prostate cancer through regulating hormone levels as well as reducing your risk of cardiovascular disease, osteoporosis, non-insulin dependent diabetes, obesity and hypertension.

30 minutes a day

How much activity should you be doing?

If you haven't been active, you should start with moderate activities and gradually increase the duration, frequency and intensity working your way up to 30 minutes or more five or more days a week. *(It can be broken into three 10-minute or two 15-minute lots)*

If you are active but want to do more, increase the intensity, duration or frequency. Moderate to vigorous activity for 45 minutes or more five days a week will increase your health benefits

TIPS FOR BEING MORE ACTIVE

Be specific and choose variety. Rather than having general goals like 'getting in shape' or "exercising more", choose concrete goals such as walking 30 minutes on Tuesday and doing stretching exercises five minutes each morning. The more variety you have, the more likely you will continue.

Incorporate fitness into your lifestyle. Begin to see exercise as an everyday opportunity. For example, use the stairs instead of the elevator, walk during lunch, or bike to work. Combine fitness with your family chores and activities, such as raking leaves or gardening.

Get a support system. Build a support system of family, friends, co-workers, and/or neighbours. They can help to encourage you when your motivation low. You can also exercise with someone else.

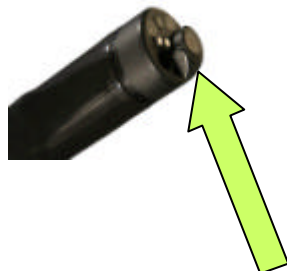
Expect setbacks and prepare for obstacles. Things like time, illness, or bad weather may occasionally get in the way. Disruptions are inevitable. Accept them and move on. If you go off your program, you can always adapt and resume. Some exercise is always better than none at all.

If you have not been regularly active or have any health concerns, consult your physician before you begin an exercise program.



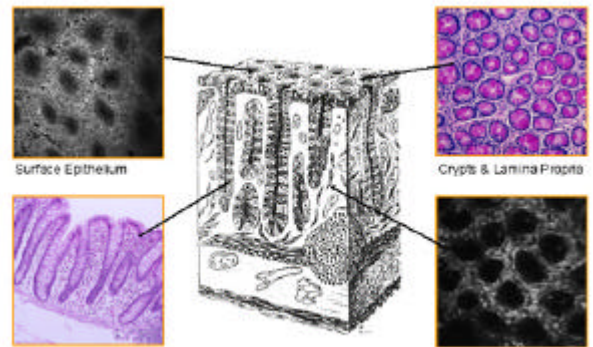


www.optiscan.com.au



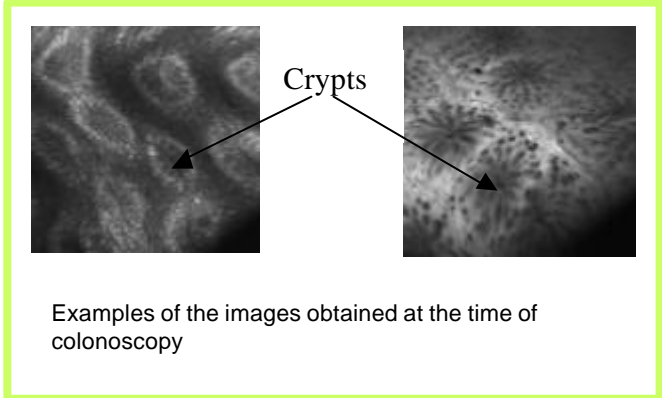
Confocal Imaging Window

The Optiscan flexible confocal endomicroscope. The tip has a camera inserted that magnifies by 1000 fold (Confocal Imaging Window).



Colonic Mucosa

The mucosal surface of the colon is composed of numerous crypts or colonic glands, orientated as straight tubular glands extending into the deep layers of the bowel wall.



Examples of the images obtained at the time of colonoscopy

Cabrini Monash University Academic Surgical Department Forthcoming Events 2003

Sir Edward Hughes Memorial Clinical Research Prize in Surgery, Cabrini Hospital Saturday 25 Oct 2003

An annual event for surgical trainees in Australasia to present research activities. Sponsored by Johnson and Johnson Medical the winner receives \$5 000.00 and the opportunity to present at the RACS Scientific Conference.

Cabrini Research Day Tuesday 18th November 2003

The theme of research day this year will be aspects of aged care and the ageing population. Other activities will also be included, along with poster presentations and displays of research activities from various departments throughout the hospital. Research Day is open to the general public.

CLINICAL RESEARCH ACTIVITIES 2003

VIRTUAL COLONOSCOPY STUDY: Clinical efficacy of multi-slice CT-Colonography (virtual colonoscopy) compared to actual colonoscopy in the diagnosis of colorectal disease. AF Little, AL Polglase, A Laviopierre, G Lawler, J Cameron, M Schneider-Kolsky, J Clooney

APPROVe STUDY (VIOXX): A multicentre, randomised, parallel group, placebo-controlled, double-blind study within-house blinding to determine the effect of 156 weeks of treatment with MK-0966 on the recurrence of neoplastic polyps of the large bowel in patients with a history of colorectal adenomas. FA Macrae, AL Polglase, C Farmer, R Wale, W Johnson, I Jones, P McMurrick, and interstate and overseas investigators

ALCCaS STUDY: Australasian, multicentre, prospective, randomised, clinical study comparing laparoscopic and conventional open surgical treatments of colon cancer in adults. P McMurrick, AL Polglase, B Stewart, I Faragher, P Sitzler and interstate and overseas investigators.

OUTCOME OF SURGICAL TREATMENT OF COLONIC CANCER - A SINGLE SURGEON STUDY:
AL Polglase, E Torey, A Tremayne

THE MELBOURNE ASHKENAZI BOWEL STUDY STAGE II: Expansion of the phase I project in collaboration with Peter MacCallum Cancer Institute to establish genetic testing at Cabrini. H Debinski, P Waring, J Sambrook, A Polglase

OPTISCAN PILOT STUDY: Examination of the human colonic mucosa using the Optiscan flexible confocal endomicroscope. AL Polglase, H Debinski, W Downey, C Farmer, D Fone, P Grossberg, A Jakobovits, W Johnson, F Macrae, P McMurrick, S Pianko, A Smith, R Wale, S Woods, I Willett, Department of Epidemiology at Cabrini, Optiscan Pty Ltd, Pentax Corporation

SPECIALIST REFERRAL TO THE CANCER INFORMATION SUPPORT SERVICE: Project to evaluate the effectiveness of a telephone based support program for men newly diagnosed with colorectal or prostate cancer. Anticancer council in collaboration with AL Polglase, RJ Wale, R Snow.

LOCAL ANAESTHETIC FOR REMOVAL OF DRAIN TUBE: DOES IT WORK? Trial to determine if local anaesthetic reduces the discomfort of drain tube removal. J Chee, A Polglase, C Farmer, P McMurrick, I Cunningham, R Wale

PAINBUSTER FOR POST COLORECTAL SURGERY PAIN: A prospective randomized double blind trial to determine the effectiveness of local anaesthetic infusion. AL Polglase, R Wale, S Woods, W Johnson, J Chee

A NEW DEVICE FOR BANDING HAEMORRHOIDS: Initial experience with the shortshot Haemorrhoidal Multi-Band Ligator. J Chee, A Polglase, I Cunningham, C Farmer, R Wale, P McMurrick

MANUSCRIPTS IN THE PRESS

Men with colorectal cancer are predisposed to prostate cancer. ANZ J Surg May 2003 AR Moot, AL Polglase, GG Giles, OM Garson, V Thursfield, D Gunter.

Transanal Endoscopic Microsurgery (TEM): the first 50 cancers. KC Farmer, RJ Wale, J Winnett, I Cunningham, P Grossberg, AL Polglase. ANZ J Surg August 2002

Extending the shelf-life of decontaminated in-use colonoscopes. Accepted (letter) Journal of Gastroenterology and Hepatology Accepted for publication Aug 2003 RG Riley, CJ Beanland, AL Polglase

MANUSCRIPTS SUBMITTED 2003

Local Recurrence following Surgical Treatment for Carcinoma of the Lower Rectum. Submitted Mar 2003 ANZ J Surg. A Polglase, S Grodski, A Tremayne, J Chee, P Bhathal

Helicobacter Pylori Incidence in Patients with Post-Anaesthesia Nausea. Submitted Journal of Anaesthesia and Intensive Care. S Woods, J Chee, A Tremayne, J Clooney

MANUSCRIPTS IN PREPARATION

Outcomes after palliative resections for colorectal cancer. A Polglase, C Ooi

APC gene variants in Melbourne's Ashkenazi Jewish population. Prevalence and attitudes to gene testing. HS Debinski, L Curnow, M Southey, J Savulescu, AL Polglase

Morbidity and mortality following colonic resection for cancer. AL Polglase, E Torey, AB Tremayne.

Duodenal Stenting for Malignant Gastric Obstruction: A Local Experience. Justin Chee, Simon Woods

Cancer of the colon: Management outcomes for colon cancer in a series of 210 patients treated by one surgeon A Polglase, A Tremayne, E Torey, A Burgess

In vivo imaging of normal human colonic mucosa using fluorescent Confocal endoscopic imaging. P Delaney, W McLaren, A Polglase, S Skinner

PAST PRESENTATIONS

Tackling Bowel Cancer: in the Ashkenazi Jewish Community, Beth Weizmann Community Centre, Melbourne June 2003

Tackling Bowel Cancer. Royal Children's Hospital, Melbourne June 2003

Optiscan, New Technology Advisory Meeting, Flexible Confocal Colonoscope: Pilot Study, The Cabrini Experience, Tokyo, Japan, June 2003



CABRINI MONASH UNIVERSITY ACADEMIC SURGICAL DEPARTMENT
SUITE 20, ISABELLA ST, CABRINI HOSPITAL, MALVERN, 3144

PH: 9508 1651

FAX: 9508 1657

EMAIL: adrian.polglase@med.monash.edu.au