

Chairman's Report

Professor Adrian Polglase

Season's Greetings to all from the Cabrini Monash University Academic Surgical Unit.

2002 has been an interesting and productive year both educationally and research wise.

The new system of teaching senior medical undergraduates at Monash University employing Selectives rather than the previous didactic form of teaching has been successfully introduced at Cabrini. There is little doubt that Selectives which expose students to a more practical learning experience will make them more effective doctors from the time of graduation. I would like to thank Simon Woods for his commitment as Clinical Dean and all the staff who contributed to a very successful introduction of the new program. In 2003 the Selectives will be expanded to include an Emergency Department Selective.

Our research programme as outlined on pages 6,7 continues to progress very satisfactorily. We are particularly pleased to have the opportunity to collaborate with Optiscan Imaging in evaluation of a new form of colonoscope, which magnifies the lining of the bowel 1000 fold. It has the potential to diagnose large bowel pathology instantaneously without the need for immediate histological examination. More information can be found on page 5.

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The influence of a colorectal service on the outcome of patients with colorectal cancer

A recent study published in Colorectal Disease demonstrated that over the last five years there have been significant improvements in the survival of patients with colorectal cancer, most notably in patients with nodal metastases at the time of diagnosis, who were managed by a specialist service.

The audit was conducted at Fremantle Hospital where a colorectal service was established in 1996 with the appointment of a single surgeon accredited in colorectal surgery. The aim of the audit was to perform a prospective audit of all patients with colorectal cancer who were referred to a colorectal service for management and to compare their outcomes and survival with a historical control group which had been treated at the same hospital.

All patients referred to this unit with a histologically proven colorectal cancer were entered into a database and treatment, in particular the surgery, was standardised by the use of clinical pathways.

The study also highlighted how prospective auditing can be an important educational tool that allows a specialist service to reflect on its results.

C Platell, The influence of a colorectal service on the outcome of patients with colorectal cancer Colorectal Disease 2002: 4; 332-8.

The Sir Edward Hughes Memorial Research Prize in Surgery 2002

The fourth annual Sir Edward Hughes Memorial Clinical Research Prize in Surgery was held at Cabrini on October 12th 2002.

The meeting was an outstanding success with ten excellent abstracts selected for presentation on the day. The winner for 2002 was Dr Shomik Sengupta a surgical trainee from the Royal Melbourne Hospital who presented the outstanding research project "Butyrate delivery to the distal colon suppresses colorectal tumorigenesis in rats".

The results of this research demonstrated that there was unequivocal evidence that dietary fibre may suppress the early events of carcinogenesis in the distal colon by at least two mechanisms: exposure of the epithelium to its fermentation products and changes to physical properties of the luminal contents.



L TO R:
Professor Adrian Polglase, Lady Alison Hughes, Dr Shomik Sengupta

MEDICAL STUDENTS

Selectives were introduced into the medical student curriculum for the first time this year. Medical students attending Cabrini were placed into a 6-week specialty that provided an increased opportunity for improving clinical skills and active involvement in patient management. Selectives offered included Surgery, Medicine, ICU/Acute Medicine & Oncology/Palliative Care.

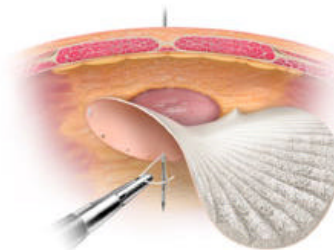
The curriculum year at Cabrini in 2003 will be expanded to include another rotation and with the opening of the Emergency Department at Cabrini this year the range of Selectives in 2002 will widen to incorporate an Emergency Department Selective.

HERNIA REPAIR WORKSHOP AT CABRINI

On Saturday November 30th, 2002 the second Laparoscopic Ventral & Incisional Hernia Repair with Gore-tex® Dualmesh® Plus Workshop was hosted at Cabrini Hospital. A group of surgeons from Victoria and South Australia attended a workshop to learn the technique. Cabrini Surgeon Mr Simon Woods facilitated the course and was joined by Dr Todd Heniford, Assistant Professor of Surgery, University of North Carolina, USA in teaching the technique and the principles underlying it.

This new operation employs laparoscopic (keyhole) technology to insert a patch of a special mesh material into the abdomen, securing it over the hole in the muscle with a combination of sutures and staples. The patch is made of GORE-TEX® and is specially designed so that one side adheres firmly to the muscle, but the other side does not adhere to the intestine. The patch is also impregnated with antiseptic chemicals to minimise the chance of infection. The patients scar tissue grows into one side of the mesh, which is an extremely durable product, maintaining its strength for the life of the patients.

W. L. Gore and Associates, Inc. sponsored the workshop. Olympus & Tyco generously supplied equipment for the hands-on laboratory component of the course.



Application of a Goretex® patch

"Tackling Bowel Cancer"

an initiative of the
Cabrini Monash University Academic

Hugh Morgan Endorses Tackling Bowel Cancer

"Tackling Bowel Cancer" campaign was successfully launched at the Cornerstone Lecture Series at Cabrini in July 2002 with Hugh Morgan AC endorsed as the patron of the campaign.

"Tackling Bowel Cancer" has the following aims:

1. To destigmatise & demystify bowel cancer thereby increasing awareness of bowel cancer as a major public health issue
2. To improve awareness of the environmental & genetic factors which influence the development of bowel cancer.
3. To improve awareness of the symptoms & signs of bowel cancer.
4. To improve awareness and attitudes on detection, investigation and treatment of bowel cancer.

Members of the Cabrini Monash University Academic Surgical Unit have been active in promoting the "Tackling Bowel Cancer" message and have presented at Cabrini, on television and radio, as well as more recently at a community seminar at the St Kilda Town Hall. As well as Adrian Polglase presenting "Tackling Bowel Cancer" Mr Bob Rose, Collingwood Legend, also presented a personal perspective on the disease and outlined the importance of screening in saving lives. Bob's family has been sadly affected by bowel cancer. Dr Henry Debinski presented a fascinating overview of the Melbourne Ashkenazi Bowel Cancer Project and the increased risk of bowel cancer for the Jewish community.

These strategies will be expanded in 2003.

For further information:
www.tacklingbowelcancer.com

Chairman's Report cont.

We have completed the first phase of our investigation into virtual colonoscopy and its comparison in effectively diagnosing pathology versus actual colonoscopy. This information will become available in 2003.

The Tripartite Colorectal Meeting mentioned in our last newsletter took place at the Crown Casino with approximately 1000 registrants from around the world. The meeting focused on colorectal diseases with much of the programme being taken up on subjects related to colorectal cancer. The whole meeting was an outstanding success and is scheduled to be held again in Birmingham in 2003.

Finally our "Tackling Bowel Cancer" initiative continues to gain momentum (see adjacent column).

Adrian Polglase



L to R:
Adrian Polglase, Bob Rose, Henry Debinski at the Tackling Bowel Cancer Community Awareness Seminar St Kilda Town Hall November 28th 2002

\$7m trial to target bowel cancer

The government announced in August that a national screening program to control bowel cancer, which kills 90 Australians a week, would be tested next year. The pilot program is scheduled to start in Mackay in November and then in Melbourne and Adelaide over the next six months. More than 50,000 people aged 55-74 years will be mailed self-test kits, which can be used in their homes. The kits can detect small amounts of blood in the faeces, which can be an early indicator of bowel cancer. Overseas trials of this testing have shown that early detection can cut bowel cancer death rates by up to 33%. The Federal Government will evaluate the 18-month pilot program before making a decision on whether to establish a national bowel cancer-screening program.

As reported in The Age, Aug 2002

Healthy Living



Fibre for Intestinal Balance

- Improves bowel health and promotes regularity
- Helps guard against bowel cancer
- Helps lower cholesterol
- Helps to regulate blood sugar levels
- Assists weight loss

REFERENCES:

1. Wahlqvist, M., Food and Nutrition, Allen & Unwin, Sydney. 215-21,1997
2. Davidson, M., et al, "Long-term effects of consuming foods containing psyllium seed husk on serum lipids in subjects with hypercholesterolemia". Am J Clin Nut, (67):367-76, 1998
3. Everson, G., et al, "Effects of psyllium hydrophilic mucilloid on LDL-cholesterol and bile acid synthesis in hypercholesterolemic men". J Lip Res, (33): 1183-92,1992
4. Anderson, J., et al, "Cholesterol-lowering effects of psyllium-enriched cereals an adjunct to a prudent diet in the treatment of mild to moderate hypercholesterolemia". Am J Clin Nut, (56):93-8,1992

Fibre is a vital element in any healthy diet. While vitamins, minerals and amino acids fuel growth and other body processes and carbohydrates provide energy; fibre's role is to act as the internal regulator. It keeps the digestive system in check and helps to ensure that what we don't need inside us in quickly eliminated. The average person consuming a modern 'Western' diet has a daily fibre intake of around 20 to 25 grams. Nutritionists and health researchers may enhance health and well-being and reduce the incidence of diseases such as bowel cancer.

A high fibre diet has been shown to improve health and longevity in a number of ways.

FIVE WAYS FIBRE PROMOTES GOOD HEALTH

1. FIBRE AND YOUR DIGESTION

Fibre is essential for maintaining bowel regularity and avoiding constipation. It provides bulk to waste materials, helps to make stools softer and assists the passage of waster materials through the bowel. Both constipation and diarrhoea may be improved by increasing fibre intake

2. DISEASE PREVENTION

Fibre is one of the seven interacting features of diets that may be protective against disease¹. Low fibre intake is linked to disorders including haemorrhoids, diverticulitis and bowel cancer. Fibre removes toxins and other carcinogens from the bowel and acts as a source of food for beneficial bowel bacteria, which produces fatty acids that inhibit the growth of bowel cancer cells¹.

3. HEART HEALTH

Soluble fibre binds to cholesterol secreted in bile and prevents it from being re-absorbed by the body. This in turn reduces the amount of cholesterol circulating in the bloodstream – a positive factor in maintaining a healthy heart and cardiovascular system. Studies conducted on people with high cholesterol have shown that increasing the intake of fibre such as that from psyllium husks can significantly reduce the amount of cholesterol in the blood.^{2,3,4}

4. BLOOD SUGAR CONTROL

Fluctuations in blood sugar levels are created when large amounts of glucose are absorbed from the food we eat, which causes the pancreas to secrete increased volumes of insulin to counteract the glucose. This can lead to 'highs' and 'lows' in the energy we feel during the day and in susceptible people can increase the risk of developing diabetes. Fibre slows down the rate of digestion, which means glucose is released more gradually, and variations in blood sugar levels are reduced.

5. WEIGHT REDUCTION

High fibre foods provide a feeling of satiety (fullness) that lessens the tendency to overeat. The assistance fibre gives to controlling blood sugar, as mentioned above, also aids weight control by reducing the frequency of cravings, particularly for calorie-laden sweet foods. Finally, a high fibre diet tends to be low in fat, given that soluble fibre is found mainly in plant foods.

IS ALL FIBRE THE SAME?

Dietary fibre is only found in plant foods such as fruit, vegetables, grains, bread, cereal products, legumes, nuts and seeds. There are two main types of dietary fibre –insoluble, found in wholegrain breads, cereals and vegetables, can provide faecal bulk and prevent constipation. Soluble fibre, found in fruit, oats, barley, dried or canned beans and some vegetables, may help lower blood cholesterol.

TIPS FOR BOWEL HEALTH

- Drink plenty of water. Fibre absorbs water, which helps soften stools.
- Include high fibre foods in the diet. Plant foods and wholegrain cereals are best. Roughly speaking, the less refined the food is the more beneficial is its fibre content.
- Exercise regularly
- Never ignore the urge to defecate
- Manage stress. Nervous tension dramatically affects digestive processes

Article source: www.naturalfacts.com.au/fibre



The Cabrini Human Ethics Research Committee approved application for the pilot study of the Optiscan flexible confocal endomicroscope in October 2002.

The Optiscan flexible confocal endomicroscope is a new type of imaging device which provides a highly magnified view of individual cells lining the bowel. Current methods of examining the bowel usually involve a naked eye view (colonoscopy), or removal of a small piece of tissue (biopsy) for highly magnified examination by a pathologist. It is hoped that the images produced by this new device will be suitable for visualising individual cells lining the bowel and detecting early pre-cancerous changes or other disease in living cells, without having to remove samples from the patient.

The study will examine patients with a diverse range of bowel conditions, including normal and diseased tissue, to determine whether the device can provide useful diagnostic information about changes in cell structure from multiple sites in the bowel, at the time of patient examination. Images for each patient will be compared to pathology results from small tissue samples (biopsies) removed. The instrument design for patient examination will also be evaluated.

TRIPARTITE 2002

The Tripartite 2002 Colorectal meeting was held at the Crown Towers Hotel, Melbourne, Australia on the **27 - 30 October 2002.**

This prestigious meeting is made up of three international groups represented by North America (American Society of Colon & Rectal Surgeons), United Kingdom (Association of Coloproctology of Great Britain & Ireland, Section of Coloproctology Royal Society of Medicine) and Australasia (Section of Colon & Rectal Surgery Royal Australasian College of Surgeons, Colorectal Surgical Society of Australia) and held every 3 years.

The meeting attracted over 500 registrants from Australia and overseas and members of the Cabrini Monash University Academic Surgical Unit were part of the planning committee.

Virtual Colonoscopy: (CT Colonography)

Patient Experience and Acceptance

The aim of this study was to evaluate patient experience and acceptance of computed tomographic colonography (CT-C) compared to conventional colonoscopy.

Fifty-nine patients (median age 59, range 40-81) referred for bowel cancer screening underwent CT-C immediately prior to conventional colonoscopy, performed under sedation. Patients were interviewed a few days later and asked to rate their experience and the discomfort levels of the CT-C using visual analogue scales. Further, patients were asked to state their preference for either examination as a screening test and nominate the predominant reasons for their choice.

On a rating scale of 1-5 with 1 being poor and 5 being excellent, 2/59 (17%) patients rated the CT-C as fair, 16/59 (27%) as good, 21/59 (35.5%) as very good and 11/59 (19%) as excellent (one patient did not provide an answer). 31/59 (52.5%) had slight discomfort with the procedure, 20/59 (34%) had moderate discomfort and 6/59 (10%) evaluated the procedure as very painful. Two patients had no discomfort at all. Almost half of the patients (28/59, 47.5%) preferred CT-C as a screening test (reduced procedure duration, no anaesthesia), whereas 23/59 (39%) preferred conventional colonoscopy (no discomfort, increased sensitivity, concurrent excision of polyps). Eight patients could not decide on either test but stated that without bowel preparation, they would prefer CT-C as a screening tool.

Despite the discomfort associated with insufflation of the colon and the need for bowel cleansing, most patients prefer CT-C as the polyp & cancer screening test of the future. It has not yet however been determined that virtual colonoscopy is as appropriate as actual colonoscopy in detection and treatment of polyps and cancers



CLINICAL RESEARCH ACTIVITIES 2002

The Cabrini Monash University Academic Surgical Unit is currently involved in a number of projects.

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

LOCAL RECURRENCE AFTER CURATIVE SURGERY FOR CARCINOMA OF THE LOW RECTUM: AL Polglase, A Tremayne, P Bhathal, S Grodski, J Chee

THE MELBOURNE ASHKENAZI BOWEL STUDY PHASE 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, PJ McMurrick, R Snow.

HELICOBACTER PYLORI STUDY: Exploring the incidence of helicobacter pylori in patients with post anaesthetic nausea: S Woods, J Chee, J Clooney

ENDOSCOPE SHELF LIFE PROJECT: Examining the shelf life of sterilized flexible endoscopes. R Riley, C Beanland, H Bos, A Polglase.

PUBLICATIONS:

Woods SDS, Reisner GS. Ureteral stenting via an ileal conduit using a gastroscope. J Urol 2002; 168: 185

MANUSCRIPTS: IN THE PRESS

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

MANUSCRIPTS SUBMITTED 2002

Colorectal cancer predisposes younger men to prostate cancer. Submitted to ANZ J Surg Mar 2002 AR Moot, AL Polglase, GG Giles, OM Farson, V Thursfield, D Gunter.

Extending the shelf-life of decontaminated in-use colonoscopes. Submitted to Journal of Gastroscopy and Hepatology July 2002 RG Riley, CJ Beanland, AL Polglase

MANUSCRIPTS IN PREPARATION

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

Local recurrence after treatment for cancer of the rectum at 13 cm or less from the anal verge. AL Polglase, PJ McMurrick, AB Tremayne, PS Bhathal

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

POSTER PRESENTATIONS

Sensitivity and Specificity for Adenomas and Cancers of a Quantifiable Immunochemical Occult Blood Test with Simplified Fecal Sampling. GP Young, J St John, SR Cole, M Sinatra, B Bielecki, J Bennett, S Warren, FA Macrae, A Polglase. Digestive Diseases Week San Francisco, California, May 2002

Colorectal cancer in men is associated with an increased risk for prostate cancer. AL Polglase, AR Moot, V Thursfield, OM Garson, G Giles, D Gunter. Cabrini Hospital, Melbourne Nov 2001

Evaluation of Jewish community attitudes to genetic testing. H Debinski, L Curnow, AL Polglase, J Savulescu. Cabrini Hospital, Melbourne Nov 2001



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