# New Zealand Association of General Surgeons

Annual Meeting 2013

Claudelands Conference & Exhibition Centre, Hamilton 22nd – 24th March 2013 www.nzagsconference.co.nz

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# Acute Upper Gastrointestinal & Trauma Surgery



ETHICON

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is proud to be the Gold Sponsor of the New Zealand Association of General Surgeons Annual Conference 2013

# We look forward to seeing you in Hamilton

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# Convenor's Invitation

It is with pleasure that we warmly welcome you to attend the 2013 New Zealand Association of General Surgeons meeting to be held in Hamilton, March 22nd-24th, 2013. The Association has a long and proud history of hosting well attended meetings at centres the length of the country, and this year promises to be no exception. For the first time in recent history, the meeting is being held in a major metropolitan centre. Hamilton lies in the heart of the Waikato, New Zealand's dairy farming heartland and is the tertiary hub for the whole midland region, stretching from Gisborne in the east to New Plymouth in the west. The hospital itself is one of the largest medical campuses in the southern hemisphere and is home to all the subspecialties of general surgery. Despite this, Hamilton remains "rural" at heart and as such is an excellent venue for NZAGS 2013.

The conference venue this year is the newly completed Claudelands Conference & Events Centre, a vibrant hub for many major events in the Waikato region. The theme for the meeting is "Acute Upper Gastrointestinal and Trauma Surgery". Although the theme provides a focus for the conference, the programme this year is ambitious and will touch upon most subspecialty areas of general surgery through concurrent sessions. The Trainee Day on the Friday will have something for everyone, and will be an important focal point for those approaching the Part 2 exam. As always, the meeting will also showcase our emerging surgeon-scientists with poster and oral presentations on the Sunday.

In 2013 the academic programme is being extended into the afternoon on Saturday to allow a wide range of topics to be covered. It will also offer great opportunity to talk with exhibitors and broaden networks. For those with energy remaining, the conference dinner will, as usual, be the social highlight of the weekend.

We look forward to continuing the friendly and personal nature of the NZAGS meeting in Hamilton in 2013.

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Rowan French General Surgeon

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# Thanks to our Sponsors

The New Zealand Association of General Surgeons would like to thank the following sponsors, who have confirmed sponsorship at time of printing:

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**Bronze Sponsor** 



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# Organising Committee

- Rowan French •
  - N7AGS
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- Benjamin Loveday •
- •
- Mark Grant
- Linda Porter
- Lynda Booth

- Convenor
- Bronwen Evans ANZAST
  - Trainee Day
- Shalvin Prasad Trainee Day
  - Trainee Day
    - - NZAGS Trainee Co-ordinator
  - Conference Manager

# ontact

# Meeting Office



Lynda Booth | Workz4U Conference Management PO Box 17130, Greenlane Central, Auckland 1546, New Zealand Phone: +64 9 917 3653 | Fax: +64 9 917 3651 Email: conferences@workz4u.co.nz Web: www.workz4uconferences.co.nz



# Keynote Speakers



# Robert Mason, Guys and St Thomas Hospitals, England

Robert Mason was the third generation of his family to study medicine at Manchester University qualifying with Honours and Distinction in Medicine and Surgery in 1976. After house jobs and anatomy demonstrating he moved to Edinburgh where he was an MRC Training Fellow with Professor Sir Patrick Forrest for 3 years completing his FRCS Edinburgh and MD in the field of breast cancer. He moved to Guys Hospital in 1981 as Senior Registrar in surgery and was appointed Senior Lecturer and Consultant Surgeon in the academic unit at Guys Hospital with Professor Lord McColl in 1986. There he developed his interest in oesophageal and gastric cancer completing his ChM in 1989 and was awarded a Huntarian Professorship of the Royal College of Surgeons England in the field of palliation of malignant dysphagia in 1995.

He now leads the Upper GI Cancer Unit at Guys and St Thomas Hospitals which has an international reputation in oesophageal surgery and salvage surgery for complex oesophageal disease. He has supervised 8 students to higher degrees and published over 125 chapters and papers. With the formation of Kings College Academic Health Sciences Centre he was appointed Professor of GI Surgery in 2010. Throughout his consultant practice he has been involved in postgraduate education and assessment being an examiner for the Intercollegiate MRCS, FRCS in the UK and overseas and for 3 years was covenor of examinations for the Royal College of Surgeons of Edinburgh. He was awarded the Hon Fellowship of the College of Surgeons of Hong Kong in 2012.



# Jeremy Hsu, Westmead Hospital, Australia & Clinical Lecturer. University of Sydney

Dr Jeremy Hsu is a general surgeon with subspecialty training in trauma/surgical critical care as well as breast cancer surgery. After completing general surgical training in Sydney, Australia, a year was spent in Seattle, USA at Harborview Medical Centre/University of Washington undertaking a trauma/surgical critical care fellowship. Following this, a breast cancer surgery fellowship was completed at the Westmead Breast Cancer Institute in Sydney, Australia

He currently divides his time at Westmead Hospital between trauma/emergency general surgery and breast cancer surgery. He is the Director of Trauma and holds a clinical academic appointment with the University of Sydney. Dr Hsu is an executive member of the Australia and New Zealand Association for the Surgery of Trauma, and also of the NSW RACS State Trauma Committee.

Dr Hsu is actively involved in teaching medical students and surgical trainees. In addition he is an instructor for the Definitive Surgery for Trauma Course (DSTC) and Early Management of Severe Trauma (EMST). His research interests lie in clinical outcome studies both in trauma/ emergency surgery and breast cancer surgery.

# Invited Speakers



Mr Simon Bann



Mr Grant Beban



Mr Ian Campbell



Capt Soren Hall



Mr Richard Harman



Mr Andrew Hill



Mr Grant Christey



Lieutenant Colonel Stephen Kearney



Mr Ian Civil

Mr Matt Clarke



Mr Simi Lolohea

Prof Brian Parry



Mr Rowan Collinson



Mr Murray Cox



Ms Jane Creighton



Mr Graeme Dickson



Mr David Theobald





Mr Stephen Vallance



Dr Frank Weilert

# Programme



Friday 22nd March 2013						
4.30pm - 7.	.30pm	Registration Opens				Outside Heaphy 1/2
5.00pm - 6.	.00pm	Welcome Reception				Heaphy 1/2
6.00pm - 7.00pm Opening Presentation: Trauma Respose Capabili and Future Trends. Lieutenant Colonel William and Captain Soren Hall; Facilitator: Capt Marite			ty in the Ne Fwiss, Lieut Wahrlich.	ew Zealand I enant Color	Defence Force: Current nel Stephen Kearney	Heaphy 3
7.00pm - 7.	.30pm	Welcome Reception Continues				Heaphy 1/2
7.30pm - la	te	NZAGS Trainee Dinner				Riverview
Saturday	/ 23rd Ma	rch 2013				
7.30am		Registration Opens				Outside Heaphy 1/2
7.30am – 8	.20am	Breakfast				Heaphy 1/2
8.20am	Welcome	Mr Rowan French				Heaphy 3
8.30am – 1	0.30am	Session 1: Upper GI and Trauma Surgery Session Chair: Richard Reid				Heaphy 3
8.30am	Pancreatio <b>Mr Simon</b>	: and Duodenal Trauma <b>Bann</b>				
9.00am	am Oesophageal Cancer Update- What's New Prof Robert Mason					
9.30am	Introducti <b>Mr Grant</b>	Introduction to the Australia and New Zealand Association for Surgery of Trauma (ANZAST) Mr Grant Christey				
9.40am	General Si <b>Mr Jerem</b>	General Surgeons Guide to Liver Trauma Mr Jeremy Hsu				
10.00am	The Difficເ <b>Mr Simon</b>	The Difficult Gallbladder - Bile in the Drain Day 1 (Pecha Kucha) <b>Mr Simon Bann</b>				
10.08am	The Difficult Gallbladder - Unexpected Retained Stone (Pecha Kucha) <b>Mr Grant Beban</b>					
10.16am	The Difficu <b>Prof Robe</b>	The Difficult Gallbladder - Mirrizi Syndrome (Pecha Kucha) <b>Prof Robert Mason</b>				
10.24am	24am Johnson & Johnson Sponsor Presentation Mr Peter Liggins, Business Manager Ethicon Surgical Care New Zealand					
10.30am –	11.00am	Morning Tea				Heaphy 1/2
11.00am –	1.00pm	Session 2A: Colorectal, Trauma Session Chair: Richard Reid Heaphy 3	11.00am -	- 1.00pm	Session 2B: Breast, Endocrine, Session Chair: Ian Campbell	UGI Brooklyn 1
11.00am	Haemosta <b>Mr Jerem</b>	sis in Trauma <b>y Hsu</b>	11.00am	Oncoplasti <b>Ms Jane C</b> i	c Breast Surgery That Everyone ( r <b>eighton</b>	Can Do
11.30am	Managing <b>Mr Simi L</b> o	the Spectrum of Peritoneal Mucinous Neoplasms olohea	11.25am	Decision N Mr Richard	1aking in Endocrine Surgery <b>d Harman</b>	
12.00pm	Can ERAS <b>Mr Andre</b>	Work at Your Hospital? w Hill	11.50am	Managing <b>Prof Robe</b> i	Oesophageal Perforations Wher r <b>t Mason</b>	e Help is Scarce
12.30pm	Pelvic Exa <b>Mr Grant</b>	nguination (Pecha Kucha) <b>Christey</b>	12.20pm	Intestinal F Prof Brian	Failure: How Do We Optimise The <b>Parry</b>	erapy
12.38pm	Diaphragn <b>Mr Ian Civ</b>	natic Injury (Pecha Kucha) <b>il</b>	12.50pm	Sponsor/E	xhibitor Presentation	
12.46pm	Major Vas <b>Mr Murra</b>	cular Control in Trauma (Pecha Kucha) <b>y Cox</b>				
12.54pm	Sponsor/E	xhibitor Presentation				

# Programme

1.00pm – 2.00pm		Lunch	Heaphy 1/2
2.00pm – 3.3	0pm	Session 3: General Surgery Session Chair: Win Meyer Rochow	Heaphy 3
2.00pm	Important <b>Mr Ian Ca</b>	Recent Advances in Breast Cancer Management mpbell	
2.20pm	Acute Mesenteric Ischaemia and the General Surgeon Mr Murray Cox		
2.40pm	Bariatric Complications That Might Catch Us Off Guard <b>Mr Grant Beban</b>		
3.00pm	3.00pm Anal Fistula: What Should the General Surgeon Have in the Arsenal Mr Rowan Collinson		
3.30pm – 4.30pm		Meet the Speakers and Exhibitors and View the Posters	Heaphy 1/2

4.30pm – 5.20pm	New Zealand Defence Force Medical Evacuation Simulation	Oudside Claudelands
6.30pm-midnight	Conference Dinner	Ferrybank
	Speaker: Mr Michael Hollands RACS	

Sunday 24th March 2013				
7.30am		Registration Opens	Outside Heaphy 1/2	
7.30am – 8.30am		Breakfast	Heaphy 1/2	
8.00am - 8.30am		NZAGS AGM / Executive Update	Heaphy 3	
8.30am – 10.30am		Session 4: Oncology, UGI, Endoscopy Session Chair: Richard Reid		
8.30am	CPD Chang Mr Stephe	ges Afoot at the College en Vallance		
8.40am	National Endoscopy Quality Improvement Programme Mr David Theobald			
8.50am	Abdominal Sarcoma: When to Operate, When to Refer <b>Mr Matt Clarke</b>			
9.10am	A Fools Guide to Acute UGI Bleeding - Is There an Evidence Base? Mr Graeme Dickson			
9.30am	How EUS Can Help Your Pancreatitis Patient Dr Frank Weilert			
9.50am	Jam Infected Pancreatic Necrosis: A Panel Discussion with Case Presentation - Operate or Don't Operate. Moderator: <b>Mr Richard Reid</b> Panel: <b>Mr Simon Bann, Prof Robert Mason, Dr Frank Weilert, Mr Bernd Grunewald, Mr Grant Beban</b>			

10.30am – 11.0	00am	Morning Tea	Heaphy 1/2
11.00am –1.00	Dpm	Session 5: Registrar Papers Session Chair: Linus Wu	Heaphy 3
(	Compariso <b>Dr Muham</b>	n Effects of Botox-A Injection & Combination of Botox-A & Low Dose GTN for Healing Imad Asim	
I	Introductic Dr Sarah B	on of Sacral Nerve Neuromodulation for the Treatment of Faecal Incontinence Senson-Cooper	
(	Circulating Dr Cheng \	Markers of Metabolic Change Associated with Bariatric Surgery <b>fee Chan</b>	
1	New onset Dr Stephar	of Pre-Diabetes and Diabetes after Acute Pancreatitis: A Systematic Review & Meta-Analysis nie Das	



1.00pm -

.30pm	Award Presentations and Conference Close	Heaphy 3
.20pm	Session 6: President's Report, Michael Rodgers	Heaphy 3
Timely C <b>Dr Melis</b>	holecystectomy for Acute Gallstone Disease: An Ongoing Challenge for a Provincial Centre sa Welch	
Surgical <b>Dr Faizu</b>	Resection of Hepatic Metastases from Gastric Cancer: A Systemic Review r <b>Reza</b>	
Early Rise <b>Dr Nigel</b>	e C-Reactive Protein-a Marker for Infective Complications Laparoscopic Colorectal Surgery <b>Rajaretnam</b>	
Do Maor <b>Dr Kopa</b>	i Have Increased Rates of Small Intestinal Neuroendocrine Tumours? <b>Manahi</b>	
Laparoso <b>Dr Mark</b>	opically Assisted ERCP: An Early Case Series and Technique Anthony Kelly	
The Bett <b>Ramesh</b>	er Definition of Nodal Staging in the 7th edition of TNM Manual Does Not Predict Survival <b>Kannan</b>	
Duodena <b>Dr Sherr</b>	al Injury: Diagnostic and Operative Strategies <b>y Tagaloa</b>	

1.20pm – 1.30pm	Award Presentations and Conference Close
1.30pm – 2.30pm	Lunch
	Poster Programme
	•

# Poster Programme

Meta-Analysis of Stapled Versus Handsewn Anastomosis for Loop Ileostomy Closure Dr Ahmed Barazanchi

Head And Neck Paragangliomas – Genetic Aspects and the Role for Screening Dr Akanksha Bhargava

Leak Management Post-Laparoscopic Sleeve Gastrectomy (LSG) in a Public Hospital **Dr Vincent Chong** 

The Challenges of Diagnosing and Treating Radiotherapy Induced Angiosarcoma **Dr Andrew Griffiths** 

An Audit of Urgent Interhospital Transfer Times for Trauma Patients Dr Daniel Mafi

Initial Experience of Ambulatory Hemi-Thyroid Surgery at a New Zealand Tertiary Institution **Dr Jacques Marnewick** 

Development of a Scoring System for Suspected Appendicitis Dr Robert Shao

iPancreas: The Use of Intelligent Database Systems in Acute Pancreatitis **Dr Marc Van Den Heever** 

Sclerosis in Intraductal Papilloma: a Marker For Benign Disease? Dr Nelson Wang

Adrenal Incidentalomas - a Review of Clinical Practice in a New Zealand Tertiary Hospital **Dr Binula Wickramarachchi**  Heaphy 1/2

# Social Programme

# Welcome Reception

Come and join us for a wonderful evening of networking with colleagues and friends.

Date:	Friday 22nd March 2013
Time:	5.00pm to 7.30pm, the opening presentation will be
	from 6.00pm to 7.00pm
Venue:	Heaphy 1 & 2
-	

**Cost:** Included in the full registration. Additional Tickets can be purchased at \$46.00 per person.



A coach will leave Claudelands Conference & Event Centre at 7.30pm for the Trainee Day Dinner at Riverview. The coach will travel via the Novotel .

# Meet the Speakers and Exhibitors and View the Posters

This is an opportunity to meet the speakers and discuss information you have heard during the conference. It is also an opportunity to speak to the exhibitors and view the posters.

Date:Saturday 23rd March 2013Time:3.30pm to 4.30pmVenue:Heaphy 1 & 2Cost:Included in the full registration. Additional Tickets can be purchased at \$40.00 per person

Attend this event, complete the required form and go into the draw to win an IPAD. The prize will be drawn at the Conference Dinner.

# New Zealand Defence Force Medical Evacuation Simulation

The New Zealand Defence Force (NZDF) support medical evacuations both domestically and internationally in peaceful and war zones. This year the NZDF will provide a simulated medical evacuation (Saturday, 4.30pm to 5.20pm) under fire from insurgents for conference delegates. This is an exciting viewing opportunity.....a first at the NZAGS Conference

Date:Saturday 23rd March 2013Time:4.30pm to 5.20pmVenue:Outside Claudelands Event CentreCost:Included in the cost of full registration

# Conference Dinner: Married to the Mob

Come and join us at this spectacular venue for wonderful food, beverages, and entertainment.

Date:Saturday 23rd March 2013Time:6.30pm to midnightVenue:Ferrybank, Grantham St, HamiltonCost:\$115.00 per person



\*\*Coach transportation will be provided from Novotel Tainui Hamilton. Return coach transfers will be available. Leaving Novotel Hotel: 6.30pm, 6.45pm & 7.00pm Returning to Novotel Hotel: 9.45pm, 10.30pm, 11.15pm & 12 Midnight.



# General Information

# Conference Venue

Claudelands Conference & Event Centre Corner of Brooklyn Road and Heaphy Terrace, Hamilton

# **Registration Desk**

The registration desk will be open from:

4.30pm Friday 22nd March 2013, 7.30am Saturday 23rd March 2013, 7.30am Sunday 24th March 2013.

Conference Manager: Lynda Booth 021 779 233

# Name Badges

All delegates will be given a name badge upon registration. This name badge is your official pass to the conference. It is necessary for delegates to wear their name badge at all times when on-site at the conference.

# **Conference Room**

The conference room is located in Heaphy 1

# **Industry Exhibition**

The industry exhibition is located on the Events Centre. Please refer to page 12 of the handbook for exhibition information.

# **Cell phones & Pagers**

These must be turned off, or set to silent mode when Conference is in session.

# Refreshments

Breakfast, morning tea, and lunch will be served in the industry exhibition area.

# **Car Parking**

There are free car parks available at the venue.

# **Contact During the Conference**

As a courtesy to speakers, delegates are requested to switch off mobile phones and pagers during sessions. A message board will be situated in the registration area. Delegates will need to check the message board, as we are unable to provide a personal service.

# **Smoking Policy**

Delegates should be aware that smoking is banned in public buildings and many hotels and restaurants in New Zealand, including the conference venue.



# **Special Diets**

Delegates who have special dietary requirements should make themselves known at the Workz4U registration desk during refreshment breaks and prior to social functions.

# Taxis

Claudelands Conference & Exhibition Centre and the accommodation providers are approximately 20-40 minutes drive from the Hamilton Airport depending on traffic. A taxi fare will cost you approximately \$50- \$60 one way.

Airport transfers can be arranged with the following transport providers:

# **Hamilton Taxis:**

(07) 847 7477 or 0800 477 477 www.hamiltontaxis.co.nz

# Medical

Emergency (Police, Ambulance, Fire) 111

# **Liability Disclaimer**

The Organising Committee, including the Conference Managers, will not accept liability for damages of any nature sustained by participants or their accompanying persons or loss or damage to their personal property as a result of the meeting or related events. In the event of industrial disruption or other unforeseen circumstances, the Conference Managers accept no responsibility for loss of monies.

# Exhibitor Information

# NEW ZEALAND ASSOCIATION OF GENERAL SURGEONS 2013 EXHIBITOR LISTING

# Booth No

# Company

- 002 Atrium Medical
- 003 Fleet Laboratories, NZ Agents: Pharmaco (NZ) Ltd
- 004 Ferring Pharmaceuticals, NZ Agents: Pharmaco (NZ)
- 005 Covidien
- 009 Southern Cross Health Society
- 011 InterMed Medical Ltd

# Atrium Medical Stand # 002

Level 6, 579 Harris Street, Ultimo,				
SYDNEY NSW 2007, Australia				
Telephone	(Work):	02 8272 3100		
Fax:	02 8272 3	3198		
E-Mail:	Mail: jhouston@atriummed.com			

# **Products on Display**

Atrium is a business unit of MAQUET Cardiovascular. With over 25 years' experience in biomaterial device technologies for soft tissue repair, Atrium offers a full line of polypropylene based products including our Omega 3 Fatty Acid (O3FA) coated C-QUR<sup>™</sup> barrier mesh, V-Patch<sup>™</sup> for umbilical hernia repair and TacShield<sup>™</sup> for open ventral hernia repair. Atrium is excited to launch in the NZ market C-QUR Film – an adhesion-barrier film.

# **Baxter Healthcare**

# Stand # 013

BERGER, Debra PO Box 88, NSW 2146 Toongabbie AUSTRALIA Telephone (Work): +61 2 8845 1552 Fax: +61 2 8845 1688 E-Mail: debra\_berger@baxter.com

# **Products on Display**

For over 75 years, Baxter has assisted healthcare professionals and their patients with the treatment of complex medical conditions. The company applies its expertise in medical devices, pharmaceuticals and biotechnology to make a meaningful difference in patients' lives.

Baxter Biosurgery's commitment to haemostatic, adhesion reduction and tissue sealing agents spans more than 30 years and more than 10 million surgeries. Baxter are the global authority in fibrinogen and thrombin preparations and control the entire manufacturing process from source blood collection to plasma fractionation. Our history of innovation in wound management continues today in our comprehensive range of synthetic and biological products and application devices - all the result of continuing scientific advances.

- 012 Royal Australasian College Of Surgeons
- 013 Baxter Healthcare
- 015 Medipak Surgical
- 017 Obex Medical Ltd
- 018 Sanofi
- 020 Johnson & Johnson (NZ) Ltd, Johnson & Johnson

# Covidien

# Stand # 005

HOSKING, Paul		
Private Bag 94-315,	Pakurang	ga, AUCKLAND 2140
Telephone	(Work):	09 573 6700
Fax:	09 918 3	742
E-Mail:	paul.hos	king@covidien.com
Website:	www.cov	vidien.com

# **Products on Display**

Covidien (formerly known as Tyco Healthcare) continues to develop new and exciting technologies which brings 'gold standard' products to the surgical and medical device arenas.

# Ferring Pharmaceuticals, NZ Stand # 004 Agents: Pharmaco (NZ) Ltd

STARKE, BronwynPO Box 4079, AUCKLAND 1140Telephone(Work): 09 377 3336Fax:09 307 1307E-Mail:pharmaco@pharmaco.co.nzWebsite:www.pharmaco.co.nz

# **Products on Display**

Pentasa<sup>®</sup> (mesalazine) Glypressin<sup>®</sup> (terlipressin)

# Fleet Laboratories, NZ Agents: Stand # 003 Pharmaco (NZ) Ltd

STARKE, BronwynP O Box 4079, AUCKLAND 1140Telephone(Work): 09 377 3336Fax:09 307 1307E-Mail:pharmaco@pharmaco.co.nzWebsite:www.pharmaco.co.nz

# **Products on Display**

- Fleet<sup>®</sup> Phospho-soda<sup>®</sup>
- Fleet<sup>®</sup> Enema
- Fleet<sup>®</sup> Mineral Oil Enema

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# Exhibitor Information

## InterMed Medical Ltd

Stand # 011

WITHEFORD, Ashley PO Box 33268 TAKAPUNA AUCKLAND 0740 Telephone (Work): 09 415 4800 Fax: 09 415 9045 E-Mail: ashley@intermed.co.nz Website: www.intermed.co.nz

## **Products on Display**

Learn about Instillation Therapy and the latest V.A.C.<sup>®</sup> Therapy devices, plus Replicine<sup>™</sup> Functional Keratin<sup>®</sup> for Wound Management at the InterMed Medical stand. Phone 0800 524 222

# Johnson & Johnson (NZ) Ltd, Johnson & Johnson Medical

Stand # 013

JANSEN VANVUREN, Hendrikus P O Box 62-185 SYLVIA PARK AUCKLAND 1644 Telephone (Work): 09 574 1783 Fax: 09 573 6234 E-Mail: hjansenv@its.jnj.com

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Johnson & Johnson Medical is a leading supplier of medical devices. Our business includes brands such as Ethicon, Ethicon Endo-Surgery, Ethicon Women's Health & Urology and DePuy Synthes. Our products cover a wide spectrum of devices, ranging from sutures and wound management to products for gynecologic surgery and incontinence support, neurovascular, endovascular and cardiology equipment and also orthopaedic products such as hips, knees, fingers and shoulder implants.

# **Medipak Surgical**

Stand # 015

HARRIS, Jane 31 Morningside Drive MT ALBERT 1446 Telephone (Work): 09 8466044 Fax: 09 8466808 E-Mail: jharris@medipak.co.nz Website: www.medipak.co.nz

# **Products on Display**

Karl Storz Endoscopy are world leaders in the development of M.I.S. instrumentation and documentation. With their New Zealand partner Medipak Surgical together offer a wide range for all types of surgery. We look forward to you visiting our exhibit.

# **Obex Medical Ltd**

Stand # 017

Stand # 012

KNUCKEY, Anna P O Box 26 511, AUCKLAND 1344 Telephone (Work): 09 630 3456 Fax: 09 630 9009 E-Mail: anna.knuckey@obex.co.nz Website: www.obex.co.nz

## **Products on Display**

Founded in 1983, Obex Medical's objective is to serve the needs of medical professionals with the supply of minimally invasive, consumable and implantable devices which deliver the best diagnosis and therapy for the patient. Obex also has a strong focus on meeting the changing needs of healthcare in New Zealand.

# Royal Australasian College Of Surgeons

PO Box 7451 NEWTOWN WELLINGTON 6242 Telephone (Work): 04 385 8247 Fax: 04 385 8873 E-Mail: Justine.Peterson@surgeons.org Website: www.surgeons.org

# **Products on Display**

The Royal Australasian College of Surgeons (RACS), formed in 1927, is a non-profit organisation training surgeons and maintaining surgical standards in New Zealand and Australia. The College's purpose is to be the unifying force for surgery in New Zealand and Australia, with FRACS standing for excellence in surgical care.

# Sanofi

Stand # 018

O'CONNOR, Bridget P O Box 12 851 PENROSE AUCKLAND 1642 Telephone (Work): 09 580 1810 Fax: 09 580 1811 E-Mail: bridget.o'connor@sanofi.com

# **Products on Display**

Sanofi, a global and diversified healthcare leader, discovers, develops and distributes therapeutic solutions focused on patients' needs. Sanofi has core strengths in the field of healthcare with seven growth platforms: diabetes solutions, human vaccines, innovative drugs, rare diseases, consumer healthcare, emerging markets and animal health. Sanofi is listed in Paris (EURONEXT: SAN) and in New York (NYSE: SNY).

# Venue Site Map

# **Southern Cross Health Society**

Stand # 009

MCKENNA, Alison NEWMARKET AUCKLAND 1149 Telephone (Work): 09 925 6917 Fax: 09 379 2745 E-Mail: alison.mckenna@southerncross.co.nz

## **Products on Display**

Southern Cross Health Society's Affiliated Provider programme provides Southern Cross members with access to a range of healthcare services at agreed prices. Within the programme are surgeons, specialists and facilities who make life easier for members, by taking care of the prior approval and claiming process.





Session 1: Upper GI and Trauma Surgery. 8.30am - 10.30am

Pancreatic and Duodenal Trauma Mr Simon Bann Capital & Coast DHB

# **Oesophageal Cancer Update- What's New?**

Prof Robert Mason

Guys & St Thames Hospitals

The advent of TNM 7 has changed the importance of node involvement with N1 being 1-2 nodes. This when taken with research demonstrating that positive nodes across the diaphragm and visualized on PET scanning carry a bad prognosis emphasise the importance of initial staging especially with regard to nodes. Whether junctional cancer is gastric or oesophageal with regard to TNM staging is still a matter of contention. (BJC 2011;105:842, Br J Surg 2012;99:239, Br J Surg2009;96:724)

The operation undertaken is still far from clear with few randomized studies regarding technique. There is no clear evidence to favour radical surgery and the role of minimally invasive surgery is unproven with the only randomized study demonstrating no benefit. The myriad techniques used demonstrate no clear favourite and the number of published series is small considering the interest claimed. Complications unique to MIO are recognized particularly tube necrosis. (Lancet 2012,379:1887)

Neoadjuvant chemotherapy and chemoradiotherapy have been demonstrated to improve survival but it is not possible to determine who will benefit from such treatment, which is not without side effects. Randomised studies continue to determine the optimum regimen. (New Engl J Med 2012;366:2074)

Ongoing research to predict survival, and response to neoadjuvant chemotherapy, have demonstrated that tumour biology, node status, tumour volume and response predict outcome.

Imaging continues to improve over the standard PET CT scans and EUS. Differential weighting MRI and Contrast enhanced CT scanning hold promise for the future. Debate continues over the use of sequential PET scanning in predicting response.

# Introduction to the Australia and New Zealand Association for Surgery of Trauma (ANZAST)

# **Grant Christey**

Director of Trauma Services at Waikato Hospital

# General Surgeons Guide to Liver Trauma Mr Jeremy Hsu

Director of Trauma, Trauma/Breast/General Surgeon, Westmead Hospital

The management of liver trauma has changed over the last 3 decades. Almost 90% of blunt liver injuries can now be managed non-operatively. Success nonoperative management is mainly in Grade I and II injuries, however higher grade injuries do not preclude an attempt at non-operative management. The keys to successful non-operative management of liver injuries include: confirmation that the patient has no signs of haemodynamic compromise at presentation, hollow viscus injury is excluded, angiographic facilities are available for injuries with a contrast blush, and the patient can be closely monitored in a high dependency setting. The surgeon managing a liver injury non-operatively, must be aware of the potential complications including: continued bleeding, bile leak, devascularization, and haemobilia.

Although reports exist of successful non-operative management of penetrating injury, this strategy would not be recommended in centres that encounter minimal penetrating trauma.

Operative intervention is primarily dictated by the patient's haemodynamic status and presence of peritonitis. The initial maneuvers for a suspected liver injury are the same as for all trauma laparotomies ie wide exposure, evisceration, evacuation of clots and blood, four quadrant packing. Should a liver injury be discovered, an assessment must be made as to whether this injury is "small" or "big" trouble. The surgeon must have a clear operative plan to manage the injury in a stepwise, escalating method. Simultaneously, the surgeon must be strategically aware of the patient's physiology – does the patient require a damage control approach? For the general surgeon, a valid and safe approach would be performing the minimal amount of intervention to arrest bleeding from the liver at the primary operation, with a plan to either involve hepatobiliary colleagues or transfer to a tertiary centre, for the subsequent definitive procedure.

Minor liver injuries from blunt and penetrating trauma may be managed effectively with any combination of temporary packing, diathermy, argon beam coagulation and topical haemostatic agents.

Major liver injuries require a considered stepwise approach. Effective compression of the disrupted liver may be achieved by manual compression and packing from without. Should bleeding stop, the packs may be left in-situ and a planned relook laparotomy performed after optimization of perfusion, coagulation and temperature. Consideration should be given to organizing post-operative angioembolization; so called "packing plus". Should the bleeding continue in a vigorous fashion despite appropriate packing, the next most appropriate step would be a Pringle maneuver. Surgical options may then include hepatotomy with selective ligation, mass liver sutures, omental packing and non-anatomical resection with stapling devices. Penetrating injuries of the liver may also be amenable to methods of balloon tamponade and flowable haemostatic agents such as a gelatin/thrombin combination. Although much has been written about heroic maneuvers to manage retrohepatic caval injuries, for the general surgeon, often effective packing will be the most beneficial approach initially.

# The Difficult Gallbladder - Bile in the Drain Day 1 (Pecha Kucha)

Mr Simon Bann Capital & Coast DHB

# The Difficult Gallbladder - Unexpected Retained Stone (Pecha Kucha)

Mr Grant Beban Upper GI and Bariatric Surgeon, Auckland

Laparoscopic cholecystectomy is an operation performed by most general surgeons, and most will also have had to deal with the unexpected retained stone (Pecha Kucha) after surgery.

The Difficult Gallbladder - Mirrizi Syndrome (Pecha Kucha) Prof Robert Mason Guys & St Thames Hospitals

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# Haemostasis in Trauma

## Mr Jeremy Hsu

Director of Trauma, Trauma/Breast/General Surgeon, Westmead Hospital

The most significant recent advance in haemorrhage control, has been the recognition and correction of trauma coagulopathy. In contrast, little has changed with respect to the surgical control of bleeding. Principles including packing, removal of bleeding "take-outable" organs, proximal and distal control with clamps and suture ligation, all are just as relevant today as they were 100 years ago. The surgical tools have not changed – scalpel, finger, packs, diathermy, haemostats, 3'0 prolene, etc. Although "new" surgical techniques have emerged such as aortic balloon occlusion, extraperitoneal pelvic packing and improved topical haemostatic agents, haemostatic resuscitation remains the lynch-pin of traumatic haemorrhage control.

Traumatic coagulopathy has traditionally been thought of as a depletive and dilutional process following haemorrhage. Due to work over the last decade, we now know that coagulopathy may be present at the time of injury. Brohi and colleagues demonstrated that traumatic coagulopathy is due to hypoperfusion. This results in both a coagulopathy and hyperfibrinolysis. The common factor is an increase in activated Protein C. There is no doubt that crystalloid use can worsen the existing coagulopathy.

It is intuitive, that the best replacement for blood loss is blood. Given that component separation is standard, replacement with 1:1:1 (Packed Red Blood Cells:Fresh Frozen Plasma:Platelets) has been recommended. John Holcomb initiated this strategy during the war in Iraq and Afghanistan, and there is an increasing amount of civilian evidence that this strategy may be effective for the massively bleeding patient.

The hyperfibrinolysis may be readily addressed with the use of tranexamic acid. The recent CRASH 2 trial, demonstrated an overall improvement in mortality of 1.5%, and reduced the risk of death due to haemorrhage. Tranexamic acid was effective when given within three hours of injury, and particularly in those patients with a systolic blood pressure of less than 75mmHg. There was no significant difference in adverse effects. There may very well be a role for tranexamic acid in the pre-hospital setting, however this has not been tested.

While many centres in the USA are utilizing the 1:1 resuscitative strategy, data has emerged from Europe, observing the apparent effectiveness of fibrinogen concentrate and prothrombin complex concentrate (PCC) as haemostatic resuscitative agents for trauma. The obvious advantage of these products are their simple storage requirements and ease of administration. In addition, lyophilized plasma has also been used in both experimental and military settings. Schochl and colleagues described their experience using fibrinogen concentrate and PCCs, directed by thromboelastometry. FFP requirements were dramatically decreased and there were no reported significant thromboembolic complications.

Further prospective randomized trials are required before the routine use of fibrinogen concentrates and PCCs can be recommended, but there is potential impact in the hospital environment.

# Managing the Spectrum of Peritoneal Mucinous Neoplasms Mr Simi Lolohea

Waiting on Abstract and Position

# **Can ERAS Work at Your Hospital?**

### **Mr Andrew Hill**

Colorectal Surgeon. Head of the South Auckland Clinical School

Over the past decade, evolution of perioperative care in the field of colonic surgery has seen the development of Enhanced Recovery After Surgery (ERAS) or 'fast-track' programmes. These programmes incorporate a multidisciplinary approach to perioperative care and combine evidence-based practices into a multimodal perioperative care pathway that aims to reduce surgical stress and accelerate postoperative recovery with decreased hospital stay, reduced morbidity and shortened convalescence.

The development of ERAS programmes has focused on optimising individual components of perioperative care including patient education, anaesthesia, fluid management, analgesia, nutrition and ambulation. This has led to changes in many traditional aspects of surgical care, such as preoperative bowel preparation, the use of nasogastric tubes, placement of drains, enforced bed rest, and graduated diets which have been shown to be unnecessary or even harmful.

In December 2005 an ERAS programme for colonic surgery at the Manukau Surgery Centre an elective surgical unit of Counties Manukau District Health Board (CMDHB) in Auckland was initiated. This programme incorporated strategies of perioperative care based on ERAS principles and used a coordinated approach in conjunction with surgical, anaesthetic and nursing staff.

This programme has since become the standard of care for patients undergoing elective colonic resection at CMDHB. This presentation will review our experience of elective colectomy conducted within the ERAS programme and reports operative and clinical outcomes. Furthermore discussion will focus on how to implement this programme in other hospitals and share lessons learned.

# Pelvic Exanguination (Pecha Kucha) Mr Grant Christey Director of Trauma Services at Waikato Hospital

# **Diaphragmatic Injury (Pecha Kucha)**

Mr Ian Civil

Director of Surgery & Trauma Services at Auckland City Hospital

Diaphragmatic injury is uncommon in blunt trauma (<1%) and because NZ has small numbers of penetrating trauma patients (<8% of trauma admissions) diaphragmatic injury from this mechanism is also uncommon. The diagnosis can be challenging to make, particularly on the right side and an appropriate diagnostic strategy is necessary. This requires a high index of suspicion where there is blunt abdominal and pelvic crush injury, and penetrating trauma between the nipples and the umbilicus. CXR, CT, laparoscopy and laparotomy all need to be considered in the diagnostic strategy. Repair is usually straightforward and although immediate repair is necessary on the left side, timing can be delayed on the right side, particularly if there is associated liver injury.

# Major Vascular Control in Trauma (Pecha Kucha)

Mr Murray Cox

Consultant Vascular Surgeon, Counties Manukau District Health Board

The principles of proximal and distal control followed by vascular repair, which are the basis of elective vascular surgery also apply when managing major vascular injuries in the trauma setting.

However, in the trauma patient the risk of uncontrolled bleeding in an already compromised patient means that often the injured vessel should not be approached directly and proximal control needs to be obtained away from the immediate zone of injury before exploring a haematoma. Injuries close to anatomical junctions may make this particularly challenging. These facts need to be foremost in the surgeon's mind whilst planning the surgery and also when positioning and prepping the patient.

Adjuncts to using vascular clamps to obtain proximal control or for containing uncontrolled hemorrhage include remote access endovascular balloon occlusion, tourniquet, direct pressure using swabs on a stick or other instruments, foley catheter balloon occlusion and direct control with laparotomy packs and digital pressure.

In this brief presentation these principles will be highlighted and surgical approaches to major vascular structures will be outlined. With each surgical approach a particular anatomy or a technical aspect of the surgery will be highlighted.

Session 2B: Breast, Endocrine, UGI. 11.00am - 1.00pm

Oncoplastic Breast Surgery That Everyone Can Do Ms Jane Creighton Waikato DHB

# **Decision Making in Endocrine Surgery**

Mr Richard Harman

Different and difficult situations during Endocrine surgery will be reviewed and discussed. Endocrine surgery presents many challenges and sound decision making as in all surgery is paramount to a good outcome.

This will be a review and discussion paper based on surgical scenarios in thyroid parathyroid and adrenal surgery.



# Managing Oesophageal Perforations Where Help is Scarce

Prof Robert Mason

Guys & St Thames Hospitals

Classical presentation of chest pain following vomiting is common in young individuals but in the elderly can present with an effusion and suspected pneumonia. If the perforation is into the pleural cavity then the outlook is good if recognized. This is contrary to the presentation in some young individuals where the perforation is contained in the mediastinum and rapid onset of mediastinitis has a very poor outlook.

The classical presentation of subcutaneous emphysema is uncommon in practice is more likely to represent a rupture of a bulla in the airway. Such individuals have marked pain and emphysema but are not systemically unwell. A contrast swallow reveals no oesophageal leak and they settle rapidly.

The management of oesophageal rupture centres on early recognition, rapid resuscitation and treatment by chest drainage and surgery. The tear in the mucosa is usually longer than the muscle and endoscopy prior to surgery may well help. Primary repair can be undertaken in early perforation with minimal contamination but if in doubt use a t-tube to create a fistula. Thorough lavarge and placement of drains and gastrostomy and feeding jejunostomy are mandatory. The use of stents is contentious but may help in extreme circumstances where surgery is not available. They must be removed within 6 weeks.

If in remote settings then chest drainage and resuscitation prior to transfer are required. In a very sick dying patient then a cervical oesophagostomy and stapling the lower oesophagus at the hiatus together with a mediastinal drain can be life saving.

Surg Today 2007;37:888, Surgeon 2007;5:39

# Intestinal Failure: How Do We Optimise Therapy

**Prof Brian Parry** The University of Auckland

Session 3: General Surgery. 2.00pm - 3.30pm

## Important Recent Advances in Breast Cancer Management Mr Ian Campbell Waikato DHB

Sentinel node biopsy has without a doubt been the major advance in surgical technique to reduce breast cancer morbidity in recent years. The limit of applicability of sentinel node based management are yet to be proven, especially for bad biology disease and larger and multifocal breast cancers.

Studies such as the American College of Surgeons Z0011 Trial have also raised the prospect that axillary dissection might not be necessary for some women with involved axillary nodes –as long as radiotherapy to the breast is being administered. Other studies, such as the Dutch MIRROR series, suggest avoidance of axillary dissection even with micrometastases to axillary sentinel nodes may significantly compromise axillary control. In the Canadian Led MA20 Trial, women with high risk node-negative or node-positive breast cancer treated with breast conserving surgery, were randomized to Whole Breast Irradiation or WBI plus Regional Node Irradiation to the internal mammary, supraclavicular, and high axillary lymph nodes. Adding RNI resulted in an improvement in isolated locoregional disease free survival, distant DFS, and OS. Contrary to Z0011, here is a study of more aggressive local therapy to lymph nodes for women with higher risk breast cancer, showing major benefits.

Results from Intrabeam radiotherapy and a local anaesthetic study will also be reviewed.

# Acute Mesenteric Ischaemia and the General Surgeon Mr Murray Cox

Consultant Vascular Surgeon, Counties Manukau District Health Board

Acute Mesenteric Iscahemia (AMI) although relatively rare remains a challenging diagnostic and management problem with a high mortality rate. It can be classified into 4 types:

Embolic: largely associated with atrial fibrillation, myocardial infarction or some other cardiac embolic source in a patient who may not have a significant atherosclerotic load. This form of AMI has the most dramatic presentation and the prognosis without emergency revascularization of the gut is extremely poor.

Thrombotic: The majority of these cases are caused by acute thrombosis at the origin of the SMA. These patients have cardiovascular risk factors and may also have had symptoms of mesenteric angina prior to the acute presentation. Collateral formation may maintain some arterial supply to the gut and the presentation is often less dramatic then in patients with embolic AMI. Because of extensive atherosclerotic disease of the aorta revascularization by open surgery can be extremely challenging. If clinical status allows, endovascular intervention can be considered.

Non Occlusive Mesenteric Ischaemia (NOMI): This occurs as a result of splachnic hypoperfusion and vasoconstriction. It is precipitated by a major clinical event such as a myocardial infarct, congestive heart failure or severe sepsis in elderly patients with atherosclerotic disease. This condition is best managed by catheter directed Papaverine infusion and by avoiding vasoconstricting agents.

Mesenteric Venous thrombosis (MVT): this is frequently associated with thrombophilia or significant intra-abdominal pathology. These patients usually present in less acute fashion with pain over weeks. Bowel infarction is rare in isolated SMV Thrombosis and in most cases anticoagulation and supportive care is the mainstay of treatment.

In this presentation I will highlight the differences between these pathologies focusing in particular on the dramatic presentation of embolic acute mesenteric ischaemia and the technical aspects of SMA embolectomy.

# **Bariatric Complications That Might Catch Us Off Guard**

Mr Grant Beban

Upper GI and Bariatric Surgeon, Auckland

The number of Bariatric operations in New Zealand is steadily increasing, and with this comes an increasing need for general surgeons involved in acute care to be aware of complications that can ensue.

Difficulties can be due to lack of familiarity with post surgical anatomy or recognising complications specific to these operations

How best to recognise and manage some of these complications will be discussed, so that should you be confronted with these problems in your emergency room, hopefully you won't be caught off guard.

# Anal Fistula: What Should the General Surgeon Have in the Arsenal Mr Rowan Collinson

Colorectal and General Surgeon MBChB FRACS

Successful treatment of fistula in ano remains an elusive Holy Grail of colorectal practice. However in general, the principles of treatment are well-established – drain the sepsis, define the anatomy and plan the definitive procedure. Sphincter preservation remains at the centre of any treatment approach.

This talk will approach 'drain, define and plan' in the context of modern imaging, and developments in surgical technique. This will include technical points around procedures such advancement flap and LIFT procedure. Other procedures that have shown promise, but not stood up to long term scrutiny will be examined.

While the commonest aetiology remains cryptoglandular disease, the discussion will also cover fistula of perianal Crohn's disease, and difficult situations such anovaginal fistula.

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Session 4: Oncology, UGI, Endoscopy. 8.30am - 10.30am

# CPD Changes Afoot at the Colleges Mr Stephen Vallance MD, FRCS(Edin), FRCS(Eng), FRACS

describing changes and the new requirements.

The RACS requirements for CPD are changing for 2013. This is in response to requirements of the Australian regulatory authorities in order that the College may maintain autonomy, which requires responsibility in self-regulation. This presentation, prepared by the members of the Professional Development and Standards Board of the College, describes the new requirements for CPD, which must now be completed annually, rather than tri-annually with an increased requirement for verification. By 2014 it is expected that all Fellows should enter their CPD details electronically via the College Website. Proof of participation in CPD is now a mandatory requirement of the Medical Registration authorities in both New Zealand (MCNZ) and Australia (AHPRA). All Fellows should (have) receive(d) a booklet

National Endoscopy Quality Improvement Programme

Mr David Theobald Clinical Director

After a Development Trial at four DHBs, a whole service approach to endoscopy quality has now progressed to be a Ministry supported National Endoscopy Quality Improvement Program (NEQIP). This Program is currently undergoing countrywide rollout and all DHBs will be using the Program by August 2013.

The aim of the program is for every unit in the country to provide a high quality, safe, patient focussed endoscopy service that is efficient, accountable and sustainable. The strategy to reach this goal will be total service improvement encompassing individual performance, unit performance and training. The methodology to reach the goal will be change based on evidence (principles of the 'Audit Cycle') and the primary tool to be utilised is the Global Rating Scale (GRS). The GRS is a standards based self assessment tool that was developed in the United Kingdom where its use has transformed the practice of endoscopy with qualitative improvements predating marked quantitive gains by about eighteen months. Similar results were seen in the New Zealand Development Trial and we expect future progress to continue to mirror that of the UK.

The main predictors of success in this work have been found to be strong clinical leadership with sound strategic focus and a robust well defined governance structure at both local and national levels. The main obstacles encountered thus far have been poor data collection systems and a lack of a quality improvement culture in units. Strategies are in place to address these problems.

In parallel to the National Rollout of the program a new governance structure for the whole of endoscopy is being developed to ensure that the work is sustainable and all aspects of endoscopy (training, unit performance and individual performance) progress in a coordinated way.

# Abdominal Sarcoma: When to Operate, When to Refer Mr Matt Clarke

General Surgeon and Surgical Oncologist, Counties Manukau

Soft-tissue sarcoma is a rare condition, infrequently seen by most General Surgeons. This paper will discuss common presentations, how best to investigate the tumour, and what criteria one might use to decide on whether to operate on the lesion or to refer to another colleague.

# A Fools Guide to Acute UGI Bleeding - Is There an Evidence Base?

## Mr Graeme Dickson

BSc(Hons) MRCP(UK) FRACP

Patients admitted with an acute upper gastrointestinal (UGI) bleed have a mortality rate of 7%. Those who bleed whilst admitted to hospital for other reasons have a much higher mortality rate of 26%. The major objective of managing these patients is to reduce mortality and the need for major surgery. A secondary objective is to prevent unnecessary hospital admission for patients presenting with bleeding which is not life threatening. In hospitals in which there is no Gastroenterology service these patients are dealt with by the Surgical team.

The Rockall risk score should be used to determine which patients do not require admission and to categorise the rest into low and high risk. Patients should be resuscitated prior to endoscopy which should be performed within 24 hours. High risk stigmata at endoscopy (active arterial bleeding, visible vessel, adherent blood clot) should be treated with adrenaline injection in combination with either heat (heater probe, gold probe) or a haemostatic clip. A repeat endoscopy should be considered within 24 hours if the initial endoscopy was sub-optimal (poor views etc). H Pylori should be tested for if there is peptic ulceration. High dose intravenous proton pump inhibitor (PPI) should be given for 72 hours following endoscopic therapy. Management of antiplatelet agents (e.g. aspirin, clopidogrel & ticagrelor) and anti-coagulants will be discussed.

11% of acute UGI bleed are variceal. The outcome of these patients is determined by the severity of their underlying liver disease. Endoscopic band ligation (EBL) is the treatment of choice. If available, terlipressin should be given prior to endoscopy in patients suspected of a variceal bleed. Following EBL patients should be treated with terlipressin (or octreotide) and antibiotics (e.g. ceftriaxone). Balloon tamponade should be used for uncontrollable variceal bleeding.

# How EUS Can Help Your Pancreatitis Patient

**Dr Frank Weilert** Director of Endoscopy at Waikato District Health Board

Session 5: Registrar Papers. 11.00am - 1.00pm

# Comparison effects of Botox-A Injection & combination of Botox-A & low dose GTN for healing

### Muhammad Asim, Neil Lowrie, Joanna Stewart\*, Simi Lolohea, Ralph Van Dalen

#### Background:

Chronic anal fissure (CAF) is perpetuated by high sphincter pressures and secondary local ischemia. Pharmacological approaches include topical nitrates and botulinum toxin (BT). BT lowers anal pressure by preventing acetylcholine release from nerve terminals while topical nitrates act by donating nitric oxide (NO).

### Aims & Objectives:

The aims of the present study were to assess the efficacy, safety and patient compliance related to BT injection and combined treatment with BT injection and lowered dose Glycerlytrinitite (GTN) cream for the treatment of CAF. We hypothesised that combined treatment would have synergistic effect on healing.

#### Methods:

Forty one consecutive patients with CAF were randomly assigned to receive one of the following treatments; Group A, injection of BT (20 U into internal anal sphincter) and group B, BT injection (20 units) and subsequent thrice daily local applications of half dose 0.2% GTN cream for six weeks. Patients were followed up at 6 and 12 weeks & were assessed; for healing of anal fissure by means of visual inspection using anal fissure grades, for faecal incontinence using Cleveland Clinic Incontinence scores and for fissure pain & headache using numeric pain rating scale.

#### Results:

At six weeks fissure healing rate was same in both groups; 38% in group A and 33% in Group B with no significant difference in mean pain scores in both groups 2.2 vs. 3.1. Also at 12 weeks no significant differences were seen in fissure healing 66% in both groups. Mean fissure pain score was slightly higher in group-A 1.7 compared to 1.1 in group B. There were slightly more patients with temporary mild incontinence in group-A at 6 weeks vs zero in group B. 46% patients suffered headaches associated with GTN treatment with only one with severe headaches.

#### Conclusion:

Single agent treatment by means of BT injection alone is well tolerated than combined treatment with GTN cream, with no significant differences in healing of CAF. Almost half of the patients suffered headaches associated with lowered dose GTN treatment.

\* Biostatistician, School of Population Health, University of Auckland.



# Introduction of Sacral Nerve Neuromodulation for the treatment of faecal incontinence.

### S Benson-Cooper1, E Davenport1, IP Bissett1, 2

### 1 Department of General Surgery, Auckland City Hospital

2 University of Auckland

#### Introduction:

Faecal incontinence (FI) is a socially stigmatised condition that has a major affect on a patient's quality of life. Over the last 10 years a promising new minimally invasive therapy (Sacral Nerve Neuromodulation, SNN) has been introduced which has been associated with marked improvement in many incontinence symptoms.

#### Aims:

To assess the early results of SNN in Auckland in terms of improved continence in those undergoing implantation of a permanent stimulator.

### Methods:

Patients who met the criteria for SNN, severe faecal incontinence, failure to respond to other measures including biofeedback, dietary modification, and appropriate surgical intervention were offered this treatment.

After an initial bowel diary patients received a lead connected to a percutaneous stimulator and only those who responded had an implanted stimulator placed. Results were assessed by repeated bowel diary, QoL scores and continence scores.

#### **Results:**

29 patients had an initial percutaneous stimulation, 28 showed adequate improvement and went on to implanted stimulator. Of these, results were available on 23. The mean number of FI episodes per week preoperatively was 12.48. The mean post implantation was 2.46. FI episodes improved following SNN by a mean of 10.02 episodes per week (95% confidence interval 3.03 to 17.01, p value = 0.0068). For those with longer follow up the initial improvement was sustained. There was a mean follow up time of 4.71 months (range 2 weeks to 24 months).

### Conclusion:

Provisional results are encouraging, with an improvement in incontinence as shown by comparing baseline incontinence diary with diary of last follow up. Sacral Nerve Neuromodulation offers a good alternative for patients with end stage FI.

# **Circulating Markers of Metabolic Change Associated with Bariatric Surgery**

### CY Chan\*, GT Jones\*, AM van Rij\*

### \* Department of Surgical Sciences, Dunedin School of Medicine, University of Otago

#### Introduction:

Obese patients who undergo gastric bypass surgery experience metabolic changes resulting in appetite loss and disappearance of type II diabetes, even before significant weight loss occurs. The underlying biological mechanisms are not well-understood. MicroRNAs are a newly-discovered class of regulatory molecules, which have been shown to modulate potentially-related processes such as lipid metabolism and insulin regulation.

#### Aims:

To determine if circulating microRNA profiles were specifically altered in the early period following bariatric surgery.

#### Methods:

All known human microRNAs (totalling 1733) were measured in plasma using microarrays (Affymetrix) in twelve obese patients undergoing gastric bypass surgery, and twelve patients undergoing non-bariatric surgery, at baseline, 5 days, and 6 weeks post-operatively. Inter-group comparative analysis of differentially-expressed microRNAs was performed using the Qlucore Omics Explorer software package.

#### **Results:**

Seven microRNAs were differentially expressed in the bariatric group at 6 weeks compared to baseline, compared to none in the non-bariatric group. Diabetic subgroup analysis within the bariatric group at 6 weeks produced 22 differentially-expressed microRNAs. These microRNAs were found to commonly regulate several genes, including IGF1R, CDK6 and TRIO, previously associated with processes such as glucose homeostasis, adipogenesis, pancreatic  $\beta$ -cell regulation, and feeding behaviour. These appear to be novel potential associations with the bariatric surgical response.

## Conclusion:

This study identified a set of microRNAs that appeared to be consistently and specifically altered following gastric bypass surgery. The target genes of the microRNAs appear to be biologically-plausible mechanistic candidates and may contribute to our understanding of the beneficial effects of bariatric surgery. This may lead to the development of an intervention that mimics these effects, enabling alternative treatments for obesity.

# New onset of Pre-Diabetes and Diabetes after Acute Pancreatitis: A Systematic Review & Meta-Anal

Stephanie Das\*, Maxim S. Petrov \*, Primal Preet Singh\*, Anthony Phillips\*\*, Rinki Murphy\*\*\*, David Nathan\*\*\*\*, John Windsor\*

- \*Department of Surgery, The University of Auckland
- \*\* School of Biological Sciences, The University of Auckland
- \*\*\* Department of Medicine, The University of Auckland
- \*\*\*\* Diabetes Centre and Clinical Research Centre, Massachusetts General Hospital

#### Introduction:

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# **Duodenal injury: diagnostic and operative strategies**

#### Sherry Tagaloa, Li Hsee & Ian Civil

#### Introduction:

Duodenal injury is uncommon in both blunt and penetrating settings. Due to its retroperitoneal location, diagnosis may be challenging. Delayed treatment may lead to morbidity and mortality. We take this opportunity to review all patients with duodenal trauma admitted to Auckland City Hospital from 1995 to 2011. Our aim was to determine the incidence, operative interventions and outcome. We also postulate that patients with duodenal, pancreatic and /or biliary injures were likely to have had delayed diagnosis and to have had operative interventions.

### **Methods and Patients:**

A retrospective review of trauma patients admitted to Auckland City Hospital between 1995-2011 was performed using the Auckland City Hospital Trauma Registry. The patients' clinical records and electronic archives were used to access operation and clinical details. Demographics including age, gender, ISS, LOS and patients outcome were reviewed.

### **Results:**

There were 22129 patients admitted to Auckland City Hospital between 1 January 1995 and 31 December 2012 (blunt 20207, penetrating 1916). There were a total of 35 patients admitted with the diagnosis of duodenal trauma. Thirty-three patients suffered blunt trauma, most commonly due to motor vehicle crash. Two patients had low velocity penetrating injury due to self-inflicted knife wounds to the abdomen. There were two deaths in this cohort; one as result of head injury and the other due to sepsis and multi-organ failure. Seven of 35 patients had radiological evidence of isolated duodenal haematoma and were managed non-operatively. Twenty-eight of 35 patients had a laparotomy. Of those who had a laparotomy, eight patients had non-therapeutic exploration of the duodenum. On only two occasions was a damage control strategy employed. Fourteen patients had duodenal repair or tube intubation. Three patients had duodenal-pancreatic-biliary complex injury requiring one pancreatico-duodenectomy and two duodenal and bile duct/liver resections. Ten of 14 operative patients had both duodenal and pancreatic injuries.

### Conclusion:

Injury to the duodenum is not common. Specific diagnosis is not often made prior to operation, but rather discovered at the time of trauma laparotomy. Operative intervention included primary repair, resection, tube intubation and pancreatico-duodenectomy. Duodenal injuries are uncommon in isolation and where major resection is likely; consideration needs to be given to the physiological status of the patients and initial damage control operation without resection.

# The Better Definition of Nodal Staging in the 7th edition of TNM Manual Does Not Predict Survival..

#### Ramesh Kannan

### Introduction:

The 7th TNM staging defines a minimum number of nodes, recommends an optimal number for each T stage, emphasizes the prognostic importance of number of regional nodes involved and upstages based on the number of metastatic lymph nodes.

#### Aims:

To study the impact of application of 7th TNM rules on nodal staging (N) of resected and pathologically reported oesophago-gastric junctional (OGJ) adenocarcinomas during the last 10 years stratifying them according to the 7th edition TNM staging and to compare against the original staging and assess possible impact of nodal neo-staging on survival.

#### Methods:

A retrospective database was used to capture the clinico-pathological data of all consecutive curative resections of OGJ adenocarcinomas over the last 10 years in two UK Upper GI Units. Any report with less than 12 lymph nodes was considered inadequate and denoted as (Nx). All cases were re-reported and re-staged according to the 7th TNM staging rules. We compared the impact of the 7th TNM staging rules on neo-staging. Overall survival was analysed using the 6th and 7th TNM staging respectively. Overall survival was sub-stratified into 2 years, 5 years and 10 years post curative resection.

### **Results:**

Fifty seven (57) pathology reports confirming OGJ adenocarcinomas were reviewed. Adequate lymphadenectomy (minimum of 12 nodes) was noted in 33 patients. Overall stage migration was noted in 36 (63%) reports with the 7th TNM staging. Of those who had adequate lymphadenectomy (33), 20 reports(60.6%) had stage migration. Survival was calculated from the time of initial surgery. Two year survival was assessed in the whole group (n=57). Five year survival for patients operated between 2000 to 2007 (n=34) and 10 year survival for those operated on between 2000 to 2002 (n=10). For stage 3b and stage 3c (7th TNM) there was a 12.5%, 8.9% and 8.9% higher survival rate respectively (for 2,5 and 10 years), compared to the original 6th TNM staging for stage 3. Correspondingly for stage 1b, the survival rate was 5.3%, 3.6% and 3.6% respectively.

#### Conclusion:

The 7th edition of TNM staging provides a detailed documentation of the lymphatic staging. This better defined lymphatic staging does not seem to predict survival or have a superior prognosticating ability.

# Laparoscopically Assisted ERCP: An early case series and technique

Dr M. A. Kelly, Dr P. Kerstens, Mr S. Bann, Mr S. Wicks, Dr N. Stace Department of General Surgery, Department of Gastroenterology Wellington Regional Hospital, New Zealand

### Introduction:

ERCP is an invaluable technique when treating biliary pathology, however the procedure becomes much more challenging when the anatomy has been distorted by previous surgical procedures. Laparoscopically Assisted ERCP (LAERCP) is a relatively new procedure that allows access to the biliary tree which is otherwise impossible via conventional ERCP in an expanding subset of patients who have undergone gastric bypass.

#### **Objectives:**

In our institute, access via the gastric remnant utilising a VersastepTM dilating port system and a two-stage endoscopic technique has been used successfully to treat several patients. We describe our technique of the LAERCP procedure and present three complex cases with excellent outcomes and no morbidity where traditional management has been unsuccessful.

#### Conclusion:

LAERCP is a safe and effective procedure for the treatment of biliary pathology in gastric bypass patients. Continued practise and modification will contribute to making this a more robust and less time consuming procedure, even in previously scarred abdomens. With the increasing incidence of bariatric surgery, and its associated sequelae, LAERCP is an appropriate management option as an alternative to traditional open surgical approaches with their related morbidity.

# Do Maori have increased rates of small intestinal neuroendocrine tumours?

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Small intestinal neuroendocrine tumours (NETs) represent approximately 40% of primary small bowel malignancies1. American data suggests that there are ethnic differences in the incidence of small bowel NETs with Blacks having higher rates as compared with whites and jejunal/ileal NETs being less common in Asian, Pacific Islanders and Native Americans2. Currently there are no data as to whether there are ethnic differences in the incidence of NETs in New Zealand.

#### Method:

A retrospective review of all small bowel NETs presenting to Waikato District Health Board region between 1 January 2007 to 31 December 2012 was performed. Cases were identified from departmental databases, histology reports, hospital coding and biochemical testing (urinary 5HIAA).

#### **Results:**

Twenty-five patients were diagnosed with a small bowel NET during the study period. Fifteen patients (60%) were of NZ European descent (NZE) and 10 were Māori (40%). The median age for Māori patients was 63.5 years and 66 years for NZEs. Calculated rates for small bowel NETs in Māori was 14.8 per 100, 000 and 6.5 per 100, 000 for NZEs. By comparison appendiceal NET rates for NZEs were 3.5 per 100, 000 and for Māori 1.4 per 100, 000; and rates for other GI NETs (oesophagus, stomach, colon, rectum combined) were 5.2 per 100, 000 for NZEs and 2.9 per 100, 000 for Māori.

#### Conclusions:

Māori living in the Waikato region had rates of small bowel NETs 2.3-fold higher than NZEs which appears to be disproportionately elevated as compared to other GI NETs in which Māori had lower rates than NZEs. This study although limited by small numbers, suggests that further studies of ethnic differences in NETs are warranted.

#### Reference:

1. Bilimoria KY, Bentrem DJ, Wayne, JD, et al: Small Bowel Cancer in the United States: Changes in Epidemiology, Treatment, and Survival Over the Last 20 Years. Annals of Surgery 2009; 249: 63-71.

2. Yao JC, Hassan M, Phan A, Dagohoy C, et al: One Hundred Years After "Carcinoid": Epidemiology of and Prognostic Factors for Neuroendocrine Tumors in 35,825 Cases in the United States. Journal of Clinical Oncology 2008; 26: 3063-3072.



# Early rise C-Reactive protein-a marker for infective complications laparoscopic colorectal surgery

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2. Department of Surgery, Adelaide and Meath incorporating the National Children's Hospital, Tallaght, D24, Dublin, Ireland.

### Introduction:

Infective complications are the most significant cause of morbidity associated with elective colorectal surgery. It can sometimes be difficult to differentiate complications from the normal post operative course. CRP is an acute phase reactant which has been reported to be predictive of post operative infective complications.

### Aims:

To investigate the pattern of CRP post operatively and its correlation with infective complications.

### Methods:

Between July 2010 and June 2012, 169 patients underwent elective laparoscopic colorectal surgery. Daily post operative CRP was measured until discharge and infective complications were observed.

### **Results:**

169 patients underwent laparoscopic colorectal surgery. 21 (12.4%) had infective complications, 6 (3.6%) had anastomotic leaks. There was a significant difference in CRP levels between those with infective complications and those without infective complications on post operative day three and five (Day 3 post op p= 0.0001, day 5 post op p=0.0001). Of those with infective complications, there was a significant difference between CRP levels when comparing pre operative levels with those on day 3 and day 5 (Preoperative vs. Day3 p=0.0001, pre operative vs. Day5 p=0.0003). A raised CRP is a predictor of infective complication from day 3 (OR 1.012, p<0.001) where as WCC is not an accurate predictor. A CRP cut off of 148 on day 3 provided the highest sensitivity and specificity of predicting infective complications, 86% and 77% respectively.

### Conclusion:

CRP is effective as an early predictor of infective complications post laparoscopic colorectal surgery and may be a useful adjunct in conjunction with an enhanced recovery program in reducing morbidity. A CRP of >148mg/ml on post operative day 3 or a persistently elevated CRP should heighten clinical suspicion of an infective complication.

# Surgical resection of hepatic metastases from gastric cancer: A systemic review

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#### **Objectives:**

Survival benefit of surgical resection of liver metastases from gastric cancer has not been well established. This systematic review has been undertaken to assess the published evidence to evaluate the rationale of metastatic liver resection in primary gastric cancer and review the outcome of hepatectomy patients.

### Methods:

Studies were identified by computerized and hand searches of the literature and scanning references A review of clinical studies between 2002 and 2012 was performed in patients who underwent gastric resection for primary gastric cancer and liver resection for metastases. The number of liver metastases and timing of surgery were significant prognostic factors for survival after hepatectomy according to a univariate and multivariate analysis.

### **Results:**

The overall survival rate for 127 reported cases was 47.3%, 11.2% and 7.2% at one, three and five years respectively with a median survival time of approximately one year. The median progression free survival was 11 months. A number of factors including extent of liver lesion, peritoneal dissemination, and incomplete lymphadenectomy, peritumoral fibrous capsule and poor histological grade were associated with poor prognosis.

### Conclusion:

Combined resection of primary gastric cancer and solitary liver metastasis confers a better prognosis including longer disease free survival period when extra hepatic metastatic lesions excluded. Hepatic tumour distribution and number of hepatic lesions and primary lymphatic spread were significant prognostic factor. The primary limitation of this study was small sample size and not enough published papers and remains small enough to be interpreted with caution. However, a larger prospective series may enable us to make more substantive conclusions regarding the role of liver metasectomy from gastric cancer.

# Timely cholecystectomy for acute gallstone disease: an ongoing challenge for a provincial centre

#### Melissa J Welch, Andrew R Moot\*

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#### Introduction:

Despite the known benefits of early cholecystectomy for acute presentations of gallstone disease, it remains an international challenge to achieve this in a timely manner1. This results in recurrent presentations to healthcare service providers at significant social and financial expense2. There is no published data regarding management of acute biliary pathology from a provincial centre, where different constraints on acute surgical services exist.

#### Aims:

To review the prior management of patients who underwent cholecystectomy for gallstone disease at a provincial hospital over a one-year period, with a particular focus on potentially preventable morbidity by performing index cholecystectomy (IC).

#### Methods:

Retrospective case note review was performed for patients who underwent cholecystectomy at Hawke's Bay Hospitals between 1 March 2009 and 1 March 2010.

#### **Results:**

One hundred and forty-eight cholecystectomies were performed over the study period. Ninety-one patients (61%) were admitted acutely prior to receiving cholecystectomy. The IC rate was 15%. Seventy-seven patients who were admitted acutely could have been suitable for index cholecystectomy, but were treated conservatively and discharged. These 77 patients subsequently had an additional 17 re-admissions (72 bed-days), 26 emergency department (ED) presentations and 51 outpatient clinic (OPC) visits prior to receiving their eventual operation. Ten of these patients (13%) developed a complication or recurrence of their acute gallstone disease whilst waiting for surgery.

#### **Conclusion:**

Hawke's Bay Hospital has a low rate of IC and fails to meet current international standards for timely surgical management of acute gallstone disease. A large proportion of those treated conservatively re-present with further morbidity. There are significant barriers to improving these standards in a provincial centre with limited acute surgical resources.

#### **Resources:**

1. Gurusamy KS, Samraj K. Early versus delayed laparoscopic cholecystectomy for acute cholecystitis. Cochrane Database Syst Rev. 2006;4:CD005440. 2. Lawrentschuk N, Hewitt PM, Pritchard MG. Elective laparoscopic cholecystectomy: implications of prolonged waiting times for surgery. ANZ J Surg. 2003;73:890-893.



# Meta-Analysis of Stapled Versus Handsewn Anastomosis for Loop Ileostomy Closure

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#### Background

Closure of loop ileostomy is a commonly performed procedure, and the anastomosis may be stapled or handsewn. Trials to date have not demonstrated an advantage using either method. The aim of this meta-analysis was to evaluate evidence comparing stapled and handsewn anastomosis for closure of loop ileostomy.

#### Methods

Relevant articles were identified by two independent reviewers from searches of MEDLINE, EMBASE, and all EBM Review databases, searched articles published between 1946 and 2012. Both randomised controlled trials and non randomised studies were included, and were analysed as subgroups. Outcomes were bowel obstruction, anastomotic leak, wound infection, bleeding, operating time, and length of hospital stay. Data were analysed using RevMan Version 5.2.

#### Results

Four randomised controlled trials (649 patients) and ten non randomised studies (2,909 patients) met the inclusion criteria. A total of 1,394 (39.2%) received a stapled anastomosis. Stapled anastomoses had a lower rate of bowel obstruction (Risk Ratio 0.66, 95% Cl 0.5 to 0.9), and a shorter operating time (-12.4 min, 95% Cl -18.5 to -6.3) and length of stay (-1.0 days, 95% Cl -1.6 to -0.5). There was no significant difference in rates of anastomotic leak, wound infection or bleeding. Subgroup analysis of the randomised controlled trials demonstrated a significantly lower rate of bowel obstruction (Risk Ratio 0.5, 95% Cl 0.3 to 0.8) and shorter operating time (-14.4 min, 95% Cl -26.1 to -2.8).

#### Conclusions

Stapled, compared with handsewn, anastomosis for closure of loop ileostomy has a lower rate of bowel obstruction, and shorter operating time and length of stay. Based on these results it is recommended that stapled anastomosis be used for closure of loop ileostomy.

# Head And Neck Paragangliomas – Genetic Aspects and the Role for Screening

#### A.Bhargava\*, R. Martin\*\*

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- \*\* Department of General Surgery, North Shore Hospital

### Introduction:

Paragangliomas are rare tumours but are associated with high morbidity due to pressure symptoms, the catecholamine released and the surgical procedures required to resect them.

#### Aims:

We present a case of a young female with a neck paraganglioma. Her mother presented with a metastatic pheochromocytoma and this lead to genetic testing and identification of a SDH-B genetic mutation. We discuss the mutation itself and also the role of screening in patients with apparent sporadic cervical paragangliomas.

#### Methods:

A PubMed, Medline and Google search was performed to identify other case series of the same mutation and the likelihood of identifying genetic mutations in patients with cervical paragangliomas.

#### **Results:**

Though the exact incidence is not known, nearly a third can be related to genetic susceptibility. The SDH mutations are the most common. This is more common amongst men, in the younger population and in patients with multiple cervical paragangliomas. Certainly genetic testing is therefore warranted in these patients and should be strongly considered in the remainder to allow early detection and treatment of the patient as well as family members.

#### Conclusion:

Whilst paragangliomas and pheochromocytomas are rare, they are often associated with genetic mutations, especially cervical paragangliomas. These lesions can often be malignant and can metastasize. Therefore they are best detected early while surgical resection may also be easier.

#### **References:**

1. Relevance of germline mutation screening in both familial and sporadic head and neck paraganglioma for early diagnosis and clinical management. Hermsen et al. Cellular Oncology. 32(4):275-83, 2010 Jan 1.

2. Cervical paragangliomas: is SDH genetic analysis systematically required?.

Fakhry et al. European Archives of Oto-Rhino-Laryngology. 265(5):557-63, 2008 May.

# Leak Management Post-Laparoscopic Sleeve Gastrectomy (LSG) in a Public Hospital

Vincent Chong, Jon Morrow, Andrew MacCormick, Richard Babor, Habib Rahman, Stephanie Ulmer and Kate Berridge \* Department of General Surgery, Middlemore Hospital, CMDHB

#### Introduction:

Bariatric surgery is considered the only clinically effective and cost effective long term treatment for morbid obesity. Laparoscopic sleeve gastrectomy (LSG) is widely used as a stand-alone bariatric procedure with its advantage of being less invasive with weight loss comparable to gastric bypass. (1)

#### Aims:

This study evaluate all major complications post-laparoscopic sleeve gastrectomy (LSG) performed in a public hospital, especially leak complications, in order to develop therapeutic strategies.

#### Methods:

All cases with complications were recorded in a bariatric database. The diagnosis of leak was confirmed by a contrast swallow study, CT scan, methylene blue swallow test or via endoscopy.

Leak was divided into early and late according to the time of presentation after surgery as per the Western Australia protocol. (2)

#### Results:

At CMDHB, 647 patients had bariatric surgery till December 2011. Major complication rate post-LSG in CMDHB was 5% with a leak rate of 2%. A total of 13 leak complications with nine "early" leak (within 1 week of surgery) and four "late" leak (after 1 week of surgery).

In the "early" group, six had a relook laparoscopy and two had a laparotomy for washout and drainage. Subsequent stents required in four patients. One "early" leak was treated non-operatively with a stent only.

In the "late" group, all had percutaneous drainage. Three out of four had stents placed to control the leak. Multiple stents procedure required before the leak resolved. The median length of stay for the "early" group was 40 days (range 4-464) compared to the "late" group which was 15.5 days (range 12-87).

#### Conclusion:

We have performed LSG for morbid obesity in a large number of patients with a low leak rate. Our experience with stents has been less successful than other reported series. Consequently we propose a treatment strategy for leak that is less reliant on the use of stents.

#### **References:**

1. Dixon JB, Straznicky NE, Lambert EA, Schlaich MP, Lambert GW. Surgical approaches to the treatment of obesity. Nat Rev Gastroenterol Hepatol. [Review]. 2011 Aug;8(8):429-37.

2. Tan JT, Kariyawasam S, Wijeratne T, Chandraratna HS. Diagnosis and management of gastric leaks after laparoscopic sleeve gastrectomy for morbid obesity. Obes Surg. 2010 Apr;20(4):403-9.



# The challenges of diagnosing and treating radiotherapy induced angiosarcoma

## A Griffiths, P Chin.

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### Introduction:

Radiation induced angiosarcoma of the breast following breast conserving surgery is a rare but well described condition. As more women undergo breast conserving therapy, there will be an expected increase in the incidence.

### Report of a case:

A 54 year-old woman underwent breast conserving therapy for grade II lobular carcinoma with adjuvant radiotherapy and hormonal therapy. She presented 5 ½ years after surgery with an area of subcutaneous thickening in the right breast. Imaging was unremarkable and core biopsies showed only post radiation changes. She was followed up closely and nine months later was found to have a nodular lesion with purpura and petechial changes. A MRI scan showed abnormal enhancement confined to the superficial subcutaneous tissue, with punch biopsies confirming angiosarcoma. She underwent a salvage mastectomy and was referred for radiotherapy and consideration of systemic therapy.

### Discussion:

Angiosarcoma is a highly malignant tumour of the vascular endothelium, typically presenting with skin changes over a period of time. The average length of presentation has been described as approximately 4 years post radiotherapy [1]. Diagnosis can be clinically difficult to distinguish from post radiation changes in the early stages, and is established on punch biopsy. Angiosarcomas have poor prognosis associated with high recurrence rates. Salvage mastectomy is the primary treatment. Ironically, treatment with neoadjuvant or adjuvant radiotherapy has shown favourable results in patients.

This case report highlights the latency and progressive development of angiosarcomas. Due to the nature of the disease, surgeons must be vigilant of vascular changes in radiotherapy exposed skin, to aid early diagnosis and adequate surgical treatment.

Photos and a review of the literature will be presented.

#### Reference(s)

1. Sheth GR, Cranmer LD, Smith BD, et al. Radiation-Induced Sarcoma of the Breast: A Systematic Review. The Oncologist 2012;17:405–418. Fakhry et al. European Archives of Oto-Rhino-Laryngology. 265(5):557-63, 2008 May.

# An Audit of Urgent Interhospital Transfer Times for Trauma Patients

### D Mafi\*, B Smith\*

#### \*Department of General Surgery, Tauranga Hospital

#### Introduction:

Trauma is the leading cause of death in the first five decades of life. The development and implementation of an organised trauma system has been shown to reduce patient disability and mortality by up to 20%. (1)

Appropriate and timely transfer to tertiary hospital for complex trauma patients improves outcomes. (2) An audit was performed to assess Tauranga Hospital transfer times of these patients.

#### Methods:

Two year prospectively collected audit from the Midlands Regional Trauma System was reviewed. Data collection form was used to identify time of injury, ISS score, degree of urgency, ED arrival, decision to transfer time, and departure, arrival time and outcomes. Neurosurgical transfers were reviewed to highlight our immediate transfer capability.

### Results: (Preliminary results only (n = 67))

Sixty-seven patients (of 759, 9%) were transferred of whom 77% were male, median age 27y. The mean overall injury-to-arrival at tertiary hospital time was 11 hours 33 mins. Once a decision to transfer was made the mean time taken to arrive at the tertiary centre was 6.5 hours. Patients with head injuries requiring transfer for neurosurgical review took on average 7.5 hours from injury time to arrival at the tertiary hospital.

### Conclusion:

We describe our experience in inter-hospital trauma transfers. The logistics of immediate transfer are complex and delays can occur. Through streamlining the process we hope to improve our transfer and hospital bypass system.

#### **References:**

- 1. Andrea D. Hill, Impact of Interhospital Transfer on Outcomes for Trauma Patients: A Systematic Review. J Trauma. 2011;71: 1885–1901
- 2. Mullins RJ, Mann NC, Hedges JR, et al. Preferential Benefit of Implementation of a Statewide
- Trauma System in One of Two Adjacent States. J Trauma. 1998; 44(4): 609-617.

# Initial experience of ambulatory hemi-thyroid surgery at a New Zealand tertiary institution

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- § Dept of General Surgery, Waikato Hospital

#### Introduction

The feasibility of ambulatory thyroid surgery has previously been described internationally. However, ambulatory surgery does not appear to be widely practised in the Australasian region.

#### Aims

This study aims to describe our early experience with ambulatory hemi-thyroid procedures including selection criteria and suggestions for the safe implementation of this practice within a New Zealand tertiary hospital setting.

#### Methods

Using a prospectively collected database, all hemi-thyroidectomy patients between 2009 and 2012 who were operated on by a Waikato District Health Board endocrine surgeon were reviewed. Patients suitable for ambulatory surgery were identified and the rate of successful ambulatory surgery, post-operative complications and readmission rates were assessed.

#### Results

Over the time period, 82 patients underwent hemi-thyroidectomy, 35 of whom were discharged within 6 hours post surgery. A further 23 patients were fit for same day discharge however were admitted overnight only due to distance of their residence from a 24hr medical facility. The remaining patients were all discharged the day following surgery, i.e. within 24 hours from the time of admission. There were no complications, re-admissions or re-presentations in any of the patients in this series.

#### Conclusion

Our early experience demonstrates that in well-selected patients ambulatory hemi-thyroid surgery can be safely achieved and is feasible within an Australasian tertiary hospital setting.

# Development of a scoring system for suspected appendicitis

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#### 2. Auckland, New Zealand

#### Introduction:

The clinical diagnosis of acute appendicitis remains an ongoing challenge. Misdiagnosis may increase the risk of appendiceal perforation or negative appendicectomy. Pre-operative scoring systems have been used to aid the diagnostic process.

#### Aims:

The aim of this study was to develop a simple scoring system to aid management of patients presenting with suspected appendicitis at our institution and to compare this with a well-recognised tool, the Alvarado score.

#### Methods:

A retrospective review was conducted at Middlemore Hospital, Auckland, New Zealand between December 2010 and November 2011. All patients presenting to the general surgical service with acute right iliac fossa pain were reviewed. Fisher's exact, Chi-square and Mann-Whitney U tests were used to analyse pre-determined study variables. The final scoring system was constructed using variables that remained significant after multivariate logistic regression. The performance of this tool was compared to the Alvarado score using ROC curve analysis.

#### **Results:**

Seven hundred and thirty-seven patients were included for review. There were 58% males. The mean age was 34 years, range 15-88 years. Six variables were found to be significant after multivariate logistic regression; gender, migratory pain, anorexia, localised peritonism, white blood cell count and C-reactive protein, p=0.00. These variables were used to construct our scoring system. The use of our scoring system would result in a missed appendicitis rate of 2.8% and negative appedicectomy rate of 12.1%. Our score outperformed the Alvarado score, ROC area 0.84 versus 0.79.

#### Conclusion:

The simple scoring system constructed in this study can be used to aid the diagnostic work-up of patients presenting with suspected appendicitis.



# iPancreas: The use of intelligent database systems in acute pancreatitis

### Marc van den Heever\*, Anubhav Mittal\*, Matthew Haydock\*, John A. Windsor\*

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### Introduction:

Acute pancreatitis (AP) is a complex disease with multiple aetiological factors and difficult to predict severity, presenting challenges to effective triage1. Databases, data mining and machine learning algorithms e.g artificial neural networks (ANN)2 may assist by storing, assimilating and interpreting data from multiple sources, potentially improving clinical decision-making beyond what traditional severity scoring systems for AP currently enable.

#### Aims:

This study aimed to 1) identify technologies best suited for use by AP researchers and clinicians to store and utilise information, 2) collate the range of collected variables, and 3) outline the potential challenges involved in establishing a national or international AP database.

### Methods:

Comprehensive systematic search of online reference databases in human medical journals. The predetermined inclusion criteria were all papers discussing 1) databases, 2) data mining and or 3) machine learning algorithms, pertaining to AP, independently assessed by two reviewers with conflicts resolved by a third author.

### **Results:**

Forty-three papers were included. Three data mining technologies were identified and five ANN methodologies (using various input variables) reported in the literature. One hundred and eighty-seven variables were identified for collection. ANN have already been shown to predict severity with superior efficacy to complicated clinical scoring systems. The database challenges raised were incomplete data, lack of access to clinical data, diagnosis reliability and an inadequate set of fields.

### Conclusion:

This is the first systematic review to examine the use of databases, data mining and machine learning algorithms in AP. This paper identifies several open source and readily available database and data mining technologies that might improve data collection and analysis for research and clinical management of AP.

#### **References:**

1. Windsor JA. Assessment of the severity of acute pancreatitis: no room for complacency. Pancreatology. 2008;8(2):105-9.

2. Bartosch-Harlid A, Andersson B, Aho U, Nilsson J, Andersson R. Artificial neural networks in pancreatic disease. Br J Surg. 2008;95(7):817-26.

# Sclerosis in Intraductal papilloma: a marker for benign disease?

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#### Introduction:

Papillary lesions of the breast represent a complex problem as they may be benign or malignant. Intraductal papilloma (IDP) is the most common lesion of this group and its prevalence has increased with the introduction of mammographic screening. Risk of malignancy associated with IDP is reported around 7% for women < 60 years and up to 30% for those > 60, hence current guidelines recommend excision for all IDPs identified on core biopsy. Lobular involution of the breast involves sclerosis and replacement of intrastromal and glandular tissue with connective tissue. Thus we hypothesise that the

presence of sclerosis on core biopsy, especially in post-menopausal women, would be in keeping with normal involution rather than malignant transformation.

#### Aim:

To investigate the rates of malignancy in IDPs with sclerosis compared to IDPs without sclerosis on histological examination.

### Method:

We searched the pathology database for all papillomatous lesions over a 5 year period in Wellington and Hutt Hospitals. Core biopsy was compared to formal excision histology to identify the rate of malignancy in IDPs with sclerosis.

#### **Results:**

86 core biopsies were confirmed as intraductal papillomas. Out of 86 IDPs, 31 demonstrated sclerosis. 4 out 31 sclerosing IDPs demonstrated malignancy compared to 14 out of 55 in the non-sclerosing group. In 94% of cases the malignancy was detected on core biopsy.

#### Conclusion:

In our cohort, sclerosing IDPs accounts for 36% of all IDPs. Of the sclerosing subtype, we found malignancy in 13%, compared to 25% in the non-sclerosing group. This reflect a lower incidence of cancer in the sclerosing sub-type. However we cannot be reassured by the presence of sclerosis to exclude malignancy. Although we have identified that core biopsy is extremely sensitive in predicting the presence of cancer within IDPs.

# Adrenal Incidentalomas - a review of clinical practice in a New Zealand tertiary hospital

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#### Introduction & Aim:

Approximately 5% of all abdominal CT & MRI scans demonstrate an adrenal incidentaloma. Whilst most are benign non-functioning adenomas, some lesions may be malignant and/or hormonally active. The aim of this study was to determine whether follow-up of adrenal incidentalomas at a large tertiary hospital follows current international guidelines.

#### Methods:

A retrospective study was performed using a key phrase search of all CT and MRI reports from Dec 2009 to Dec 2011 to identify all patients identified as having an incidental adrenal lesion.

#### **Results:**

A total of 125 patients with incidental adrenal lesions were identified, of which74 patients were deemed likely to be appropriate for further endocrinology/ radiological work up. Nineteen of the 74 patients, (26%) were referred to the endocrine service for investigation; 21/74 (28%) had complete biochemical work up and 24/74 (32%) had imaging follow up arranged. The reporting radiologist provided advice for follow up in 31/74 (42%). When advice for biochemical evaluation or endocrine follow up was given this resulted in further investigations in 8/11 (72%) cases. Of the 18 patients assessed by the endocrine service, 2/18 (11%) were found to have clinically significant lesions (1 subclinical Cushing's syndrome and 1 plasmacytoma), both of which were surgically resected.

#### Conclusions:

This study suggests that the majority of adrenal incidentalomas are not being investigated according to current international guidelines. The recommendations by the reporting radiologist appeared to determine whether patients were referred for further investigation. Despite the low number of patients who underwent assessment, significant pathology was identified in 2/18.

# Notes

