Saturday, 30 March 2019

School of Medicine
The University of Auckland
New Zealand

Programme and Abstracts

No Barriers.
More Clarity.

The ClearSight System

A simple, non-invasive approach to monitoring key haemodynamic parameters.

- Stroke Volume (SV)
- Stroke Volume Variation (SVV)
- Cardiac Output (CO)
- Systemic Vascular Resistance (SVR)
- continuous Blood Pressure (cBP)

For professional use. CAUTION: Federal (United States) law restricts this device to sale by or on the order of a physician. See instructions for use for full prescribing information, including indications, contraindications, warnings, precautions and adverse events. Edwards Lifesciences devices placed on the European market meeting the essential requirements referred to in Article 3 of the Medical Device Directive 93/42/EEC bear the CE marking of conformity.

Edwards

Table of Contents

Welcome

Dear Colleague

It is with great pleasure that I welcome you to the Auckland City Symposium for 2019.

This year's theme is 'Reducing Perioperative Complications – A guide for getting patients back to health'. Worldwide interest and awareness in Perioperative Medicine has significantly increased in the last few years with early focus on pre-operative preparation. The spotlight is now moving to the post-operative period and patients at increased risk once they've left the recovery area. To help us consider these issues we have invited renowned speakers from the field of Perioperative Medicine, Professors PJ Devereaux, Monty Mythen and Paul Myles, supported by our local speakers, in a programme which covers current thinking on issues relating to the patient's perioperative experience.

I am grateful to our industry partners for their generous support of this meeting. I also wish to thank the organising committee and Karen Patching for their time and meticulous attention to detail.

Dr Jay van der Westhuizen
ACS Convenor

International Faculty

Professor Philip Devereaux

Director, Division of Cardiology, McMaster University, Ontario, Canada

Dr Devereaux obtained his MD from McMaster University. After medical school he completed a residency in internal medicine at the University of Calgary and a residency in cardiology at Dalhousie University. He then completed a PhD in Clinical Epidemiology at McMaster University. He is the Director of the Division of Cardiology at McMaster University. He is also the Scientific Leader of the Anesthesiology, Perioperative Medicine, and Surgical Research Group at the Population Health Research Institute. Dr Devereaux is a full Professor and University Scholar in the Departments of Health Research Methods, Evidence, and Impact (HEI) and Medicine at McMaster University.

Professor Monty Mythen

Smiths Medical Professor of Anaesthesia & Critical Care, University College Hospital, London, United Kingdom

Monty is the Smiths Medical Professor of Anaesthesia & Critical Care at University College London. Director of The UCL Discovery Lab at The London 2012 Olympic legacy Institute of Sport Exercise and Health. Before returning to the UK, Monty was an assistant Professor at Duke University Medical Centre and acting Chief of Critical Care in the Department of Anesthesiology. Monty is also an Elected Council Member of the Royal College of Anaesthetists and Leads their Perioperative Medicine Programme; Chair of The Board of the National Institute of Academic Anaesthesia; A Director of Xtreme-Everest; Editor-in-Chief Perioperative Medicine. Editorial board member: British Journal of Anaesthesia; Critical Care and Co-Chairman of Evidence Based Peri-operative Medicine (EBPOM).

Professor Paul Myles

Director, Department of Anaesthesia & Perioperative Medicine, The Alfred Hospital, Melbourne, Australia

Professor Paul Myles is the Chair of the Academic Board of Anaesthesia and Perioperative Medicine, as well as the current Director of Anaesthesia and Perioperative Medicine at the Alfred. In addition, Professor Myles is an Australian NHMRC Practitioner Fellow, and Fellow of the Australian Academy of Health and Medical Sciences.

New Zealand Faculty

Speakers

Heather Gunter	Mother of Matt Gunter
Doug Campbell	Specialist Anaesthetist, ADHB
Jonathan Wallace	Anaesthetic Medical Officer, WDHB
Kerry Benson-Cooper	Intensivist, ADHB
Vanessa Beavis	Specialist Anaesthetist, ADHB
Kathryn Hagen	Specialist Anaesthetist, ADHB

Case Summaries

Jay van der Westhuizen	Specialist Anaesthetist, ADHB
Matt Sumner	Anaesthetic Fellow, ADHB
Nicola Broadbent	Specialist Anaesthetist, ADHB
Thida Evennett	Anaesthetic Fellow, ADHB

Programme

Saturday, 30 March 2019

0800	Welcome and introduction	Dr Jay van der Westhuizen

SESSION 1 - Chair: Dr Kerry Gunn

0805	Protecting patients from adverse outcomes	Heather Gunter
0835	Myocardial injury after non-cardiac surgery: Prognosis and treatment	Prof. PJ Devereaux
0910	Enhanced surgical recovery: Reducing variation	Prof. Monty Mythen

0945	Morning Break – Exhibitor Area, Atrium, School of Medicine

SESSION 2 - Chair: Dr Catherine Sayer

1015	What should we measure for post-op outcome?	Prof. Paul Myles
1050	The perils of post-op hypotension	Prof. PJ Devereaux
1125	Risk-based decision-making	Dr Doug Campbell

1155	Lunch Break – Exhibitor Area, Atrium, School of Medicine

SESSION 3 - Chair: Dr Elizabeth Maxwell

1255	Optimising intra-operative fluid therapy	Prof. Monty Mythen
1330	Data, data, data	Dr Jonathan Wallace
1400	The use and misuse of post-op HDU's	Dr Kerry Benson-Cooper

1430	Afternoon Break – Exhibitor Area, Atrium, School of Medicine

SESSION 4 – Chair: Dr Nicola Broadbent

1500	Perioperative medicine in ANZ. Where are we going?	Dr Vanessa Beavis
1530	CPET: Can we make it work?	Dr Kathryn Hagen
1600	Case summaries	Drs Nicola Broadbent & Jay van der Westhuizen
1650	Future meetings	Dr Kerry Gunn
1700	Meeting concludes	

1700	Drinks and Canapés – Exhibitor Area, Atrium, School of Medicine

Protecting patients from adverse outcomes

Heather Gunter

Mother of Matt Gunter

The HDC decision on the case discussed by Heather can be found here:

https://www.hdc.org.nz/decisions/search-decisions/2015/13hdc00482/.

The video shown by Heather can be viewed on the HQSC website at:

https://www.hqsc.govt.nz/our-programmes/patient-deterioration/patient-stories/

along with a description of their Patient Deterioration Programme.

There is some disagreement with some of the details in the video between different staff members involved in the case. This involves the timing of desaturation related to the operation, the instructions given to ward staff and monitoring being discontinued post-operatively. This further reinforces the need, as set out in the HQSC programme for critical thinking, team communication and a robust system to identify and treat the deteriorating patient.

Kerry Gunn

Myocardial injury after non-cardiac surgery: Prognosis and treatment

Prof. PJ Devereaux

McMaster University, Ontario, Canada

Worldwide >200 million adults undergo major non-cardiac surgery annually. Myocardial injury after non-cardiac surgery (MINS) is the most common major vascular complication after surgery. During this lecture participants will gain insights into the diagnostic criteria and prognosis of MINS. I will also review the MANAGE Trial design (1754 patient RCT of dabigatran versus placebo in patients with MINS) and the results. Attendees will gain an understanding of how to manage MINS based on this lecture.

Enhanced surgical recovery: Reducing variation

Prof. Monty Mythen

University College Hospital, London, United Kingdom

Enhanced Recovery (ER) after Surgery (or Fast Track) is a bundle of 'best evidence based practices' delivered by a multi-professional health care team, with the intention of helping patients recover faster after surgery [1,2].

The Enhanced Recovery Partnership Programme (ERPP) was run by the Department of Health in England from May 2009 to April 2011 to encourage the wide spread adoption of ER with the aim of improving recovery from major surgery [1,3]. The Programme initially concentrated on elective major surgery in four specialities (Colorectal, Musculoskeletal, Gynaecology and Urology). Audit of ER practice by the early adopters demonstrated greater than 80% compliance with the majority of elements recommended by the ERPP.

A pilot study using Commissioning for Quality and Innovation (CQUIN) to encourage practice change showed a dramatic improvement in outcomes in North Central London with very high levels of compliance with the ERPP recommended principles [4].

The final report published by the ERP included evidence of widespread adoption of ER in the NHS in England and achievement of stated goals i.e. reduced length of hospital stay after surgery resulting in more operations being performed despite fewer bed days, no increase in readmissions and high levels of patient satisfaction [5].

More recent reports (2018) from the UK Perioperative Quality Improvement Program (PQIP) suggests that currently only around 2/3rds of UK patients having major surgery are on an enhanced recovery program and compliance with key elements is from 31-97% [6]. General consensus backed up by published reports is that compliance is king and variation is still the enemy of quality.

References

1. DH (2010) Delivering enhanced recovery: Helping patients to get better after surgery, Department of Health, March 2010. https://www.ebpom.org/Enhanced-Recovery?newsid=1020
2. Kehlet H. Multimodal approach to control postoperative pathophysiology and rehabilitation. *Br J Anaesth* 1997, 78:606-17
3. Enhanced Recovery Partnership Programme Report DH, March 2011. https://www.ebpom.org/Enhanced-Recovery?newsid=1020
4. 4. Grace C, Kuper M, Weldon S, Lees J, Modasia R, Mythen M. Service redesign. Fitter, faster: improved pathways speed up recovery. *Health Serv J* 2011, 121:28-30.
5. Fulfilling the Potential: A better Journey for Patients a better Deal for Tteh NHS. https://www.ebpom.org/Enhanced-Recovery?newsid=1020
6. Perioperative Quality Improvement Program Annual Report 2018. https://pqip.org.uk/FilesUploaded/PQIP%20Annual%20Report%202017-18.pdf

What would we measure for post-op outcome?

Prof. Paul Myles

The Alfred Hospital & Monash University, Melbourne, Australia

Measuring clinically relevant and patient-centered perioperative outcomes provides the knowledge that enables: clinicians to optimize their practice and guide shared decision-making, researchers to set a future agenda and policy makers to prioritize healthcare spending.

Efforts are underway to standardize and define which outcome measures should be used in perioperative medicine research and audit.[1] Patient-centered outcome measures describe what the patient actually experiences and the impact an intervention has on their functional capacity, physical comfort and emotional health. This includes *quality of recovery* and longer-term health after surgery.[2]

The QoR Score was the first validated quality of recovery scale.[3] This was followed by the 40-item QoR-40[4] and the 15-item QoR-15.[5] The QoR-40 has five recovery domains including emotional state, physical comfort, psychological support, physical independence and pain control, and is scored on a scale from 40 (very poor recovery) to 200 (excellent recovery). Both the QoR-40 and QoR-15 have recently been evaluated to determine the *minimal clinically important difference*.[6]

Another health economic measure gaining increasing recognition in medical research is *days alive and at home within 30 days of surgery* (DAH_{30}).[7] As such, DAH_{30} combines mortality and morbidity into a single continuous outcome that is objective, easy to define and measure, and does not require adjudication. Most importantly DAH_{30} reflects the primary patient goal of returning home and avoiding hospital readmission, which would make it an ideal perioperative outcome measure.

Disability-free survival is a novel perioperative outcome measure that is a combination of survival (1 – mortality) and freedom from clinically significant disability as indicated by the WHO Disability Assessment Schedule (WHODAS) score.[8] In a cohort of 510 surgical patients we used the WHODAS to identify rates of DFS as 72% and 58% in ASA III and IV patients respectively. Disability-free survival is an ideal outcome metric for research and clinical audit, but also for shared decision-making.

Future clinical trials in Perioperative Medicine should utilize clearly defined, validated and standardised patient-centered outcome measures.

References

1. Myles PS, Grocott MP, Boney O, Moonesinghe SR. Standardizing end points in perioperative trials: towards a core and extended outcome set. Br J Anaesth. 2016;116(5):586-589.
2. Gornall BF, Myles PS, Smith CL, et al. Measurement of quality of recovery using the QoR-40: a quantitative systematic review. Br J Anaesth. 2013;111(2):161-169.
3. Myles PS, Hunt JO, Nightingale CE, et al. Development and psychometric testing of a quality of recovery score after general anesthesia and surgery in adults. Anesth Analg. 1999;88(1):83-90.
4. Myles PS, Weitkamp B, Jones K, Melick J, Hensen S. Validity and reliability of a postoperative quality of recovery score: the QoR-40. Br J Anaesth. 2000;84(1):11-15.
5. Stark PA, Myles PS, Burke JA. Development and psychometric evaluation of a postoperative quality of recovery score: the QoR-15. Anesthesiology. 2013;118(6):1332-1340.
6. Myles PS, Myles DB, Galagher W, Chew C, MacDonald N, Dennis A. Minimal Clinically Important Difference for Three Quality of Recovery Scales. Anesthesiology. 2016(125):39-45.
7. Myles PS, Shulman M, Heritier S, McIlroy D, Forbes A, al. e. Validation of days at home as an outcome measure after surgery: a prospective cohort study in Australia. BMJ Open. 2017;doi:10.1136/bmjopen-2017-015828.
8. Shulman MA, Myles PS, Chan MT, McIlroy DR, Wallace S, Ponsford J. Measurement of disability-free survival after surgery. *Anesthesiology.* 2015;122(3):524-536.

The perils of post-op hypotension

Prof. PJ Devereaux

McMaster University, Ontario, Canada

Patients undergoing non-cardiac surgery are susceptible to hemodynamic compromise. Most perioperative clinical care is consistent with a hypertension avoidance strategy (i.e., most patients continue their anti-hypertensive drugs before surgery and are quickly re-started on these drugs after surgery). Moreover, in-hospital patients typically have vital signed checked every 4-8 hours, based on inefficient, antiquated, manual measurements. In this lecture attendees will gain an understanding of the frequency and location of hemodynamic compromise in the perioperative setting, acquire insights into potential thresholds, and learn about the POISE-3 Trial evaluating a hypotension avoidance strategy versus hypertension avoidance strategy.

Risk-based decision-making

Dr Doug Campbell

Auckland City Hospital, Auckland New Zealand

Anaesthetists, surgeons and clinicians involved in the care of surgical patients make risk-based decisions frequently. Most often, these decisions are based on subjective assessment rather than objective risk assessment tools. This talk will outline the benefits of consistent risk-based decision making for high and low risk patients.

Necessary features of a good risk tool will be discussed. Calibration and discrimination of risk tools will be explained and how these features affect accuracy and risk stratification (triage). No risk tool fulfils all the requirements needed by a clinician. Clinicians require an improved understanding of risk including desirable mortality and morbidity outcome, competing risks and risk of non-operative management.

Improved risk-based decision making will reduce clinical variation, be patient-centred, aid efficient use of healthcare resources and be transparent and equitable.

Optimising intra-operative fluid therapy

Prof. Monty Mythen

University College Hospital, London, United Kingdom

Optimal perioperative fluid management is an important component of Enhanced Recovery After Surgery pathways. Fluid management within ERAS should be viewed as a continuum through the preoperative, intraoperative and postoperative phases. Each phase is important to improving patient outcomes; and suboptimal care in one phase can undermine best practice within the rest of the ERAS pathway.

The goal of preoperative fluid management is for the patient to arrive in the operating room in a hydrated and euvolaemic state. To achieve this, prolonged fasting is not recommended, and mechanical bowel preparation should be avoided. Patients should be encouraged to ingest a clear carbohydrate drink two to three hours before surgery.

The goals of intraoperative fluid management are to maintain central euvolemia, and avoid salt and water excess. To achieve this, patients undergoing surgery within an enhanced recovery protocol should have an individualised fluid management plan. As part of this plan, both fluid restriction and crystalloid excess should be avoided in all patients. For low risk patients undergoing low risk surgery a moderately liberal (+1-2 liter fluid balance, but no more) approach might be sufficient. In addition for higher risk patients undergoing major surgery individualized goal directed fluid therapy (GDFT) is recommended. However ultimately the additional benefit of GDFT should be determined based on surgical and patient risk factors.

Postoperatively, once fluid intake is established, IV fluid administration can be discontinued and only restarted if clinically indicated. In the absence of other concerns detrimental postoperative fluid overload is not justified and ‘permissive oliguria’ could be tolerated.
Cheers to The Dream!

Key points

- Perioperative fluid management is important. Both hypovolaemia and excessive fluid administration are associated with harm.
- Prolonged fasting before major abdominal surgery is not justified and is not supported by evidence
- Maintenance fluid requirement during surgery should be delivered with the aim of maintaining preoperative body weight.
- Goal-directed fluid therapy aims to replace losses from the circulation and optimise stroke volume throughout the perioperative period. GDFT has been shown to reduce length of stay and complications after major surgery, and therefore may have added benefits in higher risk patients within an ERAS pathway.
- In the postoperative period, enteral nutrition and oral fluid intake should be commenced at the earliest opportunity and the IV then discontinued.
- In the absence of other concerns, perioperative oliguria should be tolerated.

Carbohydrate Loaded
Hydrated
Euvolaemic
Eunatraemic
Ready to
Start to **DR**ink, **EA**t, **M**obilize

www.cheers-dream.org

References

1. Fluid management and goal-directed therapy as an adjunct to Enhanced Recovery After Surgery (ERAS). Miller TE, Roche AM, Mythen M. Can J Anaesth. 2015 Feb;62(2):158-68
2. Perioperative fluid management: Consensus statement from the enhanced recovery partnership. Mythen MG, Swart M, Acheson N, Crawford R, Jones K, Kuper M, McGrath JS, Horgan A. Perioper Med (Lond). 2012 Jun 27;1:2
3. Perioperative fluid therapy: a statement from the international Fluid Optimization Group. Navarro LH, Bloomstone JA, Auler JO Jr, Cannesson M, Rocca GD, Gan TJ, Kinsky M, Magder S, Miller TE, Mythen M, Perel A, Reuter DA, Pinsky MR, Kramer GC. Perioper Med (Lond). 2015 Apr 10;4:3.
4. Restrictive versus Liberal Fluid Therapy for Major Abdominal Surgery. Myles PS, Bellomo R, Corcoran T, Forbes A, Peyton P, Story D, Christophi C, Leslie K, McGuinness S, Parke R, Serpell J, Chan MTV, Painter T, McCluskey S, Minto G, Wallace S; Australian and New Zealand College of Anaesthetists Clinical Trials Network and the Australian and New Zealand Intensive Care Society Clinical Trials Group. N Engl J Med. 2018 Jun 14;378(24):2263-2274.
5. Effect of goal-directed haemodynamic therapy on postoperative complications in low-moderate risk surgical patients: a multicentre randomised controlled trial (FEDORA trial). Calvo-Vecino JM, Ripollés-Melchor J, Mythen MG, Casans-Francés R, Balik A, Artacho JP, Martínez-Hurtado E, Serrano Romero A, Fernández Pérez C, Asuero de Lis S; FEDORA Trial Investigators Group. Br J Anaesth. 2018 Apr;120(4):734-744.
6. American Society for Enhanced Recovery (ASER) and Perioperative Quality Initiative (POQI) joint consensus statement on perioperative fluid management within an enhanced recovery pathway for colorectal surgery. Thiele RH, Raghunathan K, Brudney CS, Lobo DN, Martin D, Senagore A, Cannesson M, Gan TJ, Mythen MM, Shaw AD, Miller TE; Perioperative Quality Initiative (POQI) I Workgroup. Perioper Med (Lond). 2016 Sep 17;5:24.

Data, data, data

Dr Jonathan Wallace

North Shore Hospital, Auckland, New Zealand

In recent years there has been a significant increase in the number of electronic systems and applications at all levels of health care. What do we do with all this data?

Increasing end-user access to clinically relevant and reliable data poses significant challenges. The traditional method of sending a request to an information analyst does not scale well with the rapidly growing demand to measure and improve the quality of clinical care. An alternative approach, that puts the power of exploring data in the hands of end users, involves using Business Intelligence (BI) software. This presentation will outline Waitemata DHB's implementation of QlikSense, which connects datasets we use every day to provide clinically useful information that engages clinicians and provides them with the detail and context required to drive change.

One of the key benefits of QlikSense is the ability to display detailed information about patient flows from referral, though to theatre and beyond. This information can then be linked to clinical process and outcome measures, both inside and beyond the operating theatre. This is of particular relevance to Anaesthesia where we practice as part of a wider team in patient care.

The use and misuse of post-op HDU’s

Dr Kerry Benson-Cooper

Auckland City Hospital, Auckland, New Zealand

I will discuss the current DCCM HDU use in elective surgical patients and some of the outcomes using a 6 month audit of the second half of 2018 as an indicator. I will discuss some of the evidence regarding prediction of outcomes and necessity of HDU admissions in elective surgical patients and where our practice fits in with this.

Perioperative medicine in ANZ. Where are we going?

Dr Vanessa Beavis

Auckland City Hospital, Auckland, New Zealand

Perioperative Medicine (PoM) is a developing field aimed at helping our most vulnerable surgical patients. Intraoperative mortality is now extremely rare (1:100,000 cases).[i] However, post-operative complications cause morbidity and are a leading cause of death in the developed world. Contributors to these figures include: suboptimal risk assessment, lack of shared decision-making, inadequate optimisation before surgery, failure to rescue and finally, fragmented post-operative management.[ii]

ANZCA has committed to improving the care of patients throughout the surgical journey. Our working definition of PoM is the multidisciplinary, integrated care of patients from the moment surgery is contemplated through to recovery. This involves: preoperative evaluation, risk assessment and preparation, intraoperative care, postoperative care (including monitoring, rehabilitation and post-discharge), communication and handover to primary care or referrer, coordination of personnel and systems, and shared decision making.

The goal is to sharpen our focus on patient-centered outcomes, which may involve decisions that were not considered when the prospect of surgery was first raised. The system should promote proactive planning, rather than reactive damage control when complications arise.

A recommendation from the 2004 ANZCA taskforce report into Perioperative Medicine concluded that PoM is the future of our specialty and that the College should advance the development of this area of practice.

Ten years on from the report, in 2014 ANZCA convened a working group to review the current state of PoM in the developed world. It proposed a different way of caring for surgical patients in the future. It would focus sharply on risk assessment, be coordinated and multi-disciplinary and emphasize clear communication, most importantly involving the patient, throughout the perioperative journey.

The working group's report to the ANZCA Council (2016) resulted in a decision to advance the delivery of perioperative care in Australia and New Zealand by education (a formal qualification), clinical practice models, professional standards and, in time, CPD.

The College has now elevated this project to form a part of the 2018-22 strategic plan. ANZCA has invested considerable resources into PoM[iii] A survey of all Fellows and trainees of ANZCA has confirmed broad support for the concept of a formal qualification in PoM. An extensive literature search (to be published) has gone some way towards identifying the coordinated perioperative care models that are effective in improving patient outcomes and cost efficiency. It also explored supplementary questions, such as the identification of the models of postgraduate education and training for health practitioners for coordinated perioperative care and the implications for postgraduate education and training of those practitioners.

With so many stakeholders in PoM, including (but not limited to) surgeons, physicians, geriatricians, intensivists, primary care and allied health, ANZCA has taken the lead and has obtained representation and input from the above Colleges and sub-specialty experts, recognising the multi-specialty and multi-disciplinary nature of PoM.

Building on the survey and the foundation provided by the literature search, the College has decided to proceed with the project.

In the initial phase, an overarching coordinating (steering) group, with broad representation, is overseeing five streams of work:

1. A qualification work stream, led by Sean McManus, Anaesthetist and Intensivist and ANZCA councillor from Queensland. This is an historic decision, as ANZCA is the first medical college to formalise the process under the umbrella of a specialist college. A fellowship in Perioperative Medicine is now under development.

2. The “Perioperative Care Models” stream is led by Jeremy Fernando, Anaesthetist and Intensivist and the Chair of the Perioperative SIG. The Perioperative SIG (with multidisciplinary membership) is a key group advocating for perioperative models of care "on the ground". Part of this work stream’s brief is to identify other work in this area by other bodies. For example, the Health Quality and Safety Commission in NZ (HSQC) is working with the intensivists to create networks of care, so that there is minimal duplication of effort and more alignment of activity in the patient’s interests between all groups.

3. The development of professional standards.

4. Continuing Professional Development.

5. The health economic case for a perioperative service.

These last three are yet to commence but are in the work plan for 2019/20.

To achieve the best outcomes, a collaborative multidisciplinary approach is essential. ANZCA is mindful that inclusivity of all those working in the PoM space is key. To that end, we are involving as many external stakeholders as we can, right from the start, to ensure success.

ANZCA's underlying philosophy for Perioperative Medicine is that the patient’s needs are at the centre of this emerging specialty.

References

i. Daniel Sessler, John W. Severinghaus Lectrue, 26th October, 2016, American Society of Anesthesiologists Annual Meeting)
ii. Ferraris, VA, et al (2014) “Identification of patients with postoperative complications who are at risk for failure to rescue” JAMA Surg, Nov;149(11)
iii. ANZCA 2018-2022 Strategic plan; Goal 1

CPET: Can we make it work?

Dr Kathryn Hagen

Auckland City Hospital, Auckland, New Zealand

Some do, some don’t, we might; Kathryn Hagen and Kate Hudig will take you through the maze that is exercising patient’s to aid pre-operative risk stratification. Did the METs study make it clear as day, or just muddy the waters? Hopefully by the end of our session, complete with case study and plenty of discussion, you will be in a position to decide.

MAJOR SPONSOR

PLATINUM

Edwards Lifesciences, based in Irvine, Calif., is the global leader in patient-focused medical innovations for structural heart disease, as well as critical care and surgical monitoring. Driven by a passion to help patients, the company collaborates with the world's leading clinicians and researchers to address unmet healthcare needs, working to improve patient outcomes and enhance lives.

For more information, visit Edwards.com and follow us on Twitter @EdwardsLifesci.

Sandy Scott
Senior Territory Manager – Critical Care

Edwards Lifesciences

Email: sandy_scott@edwards.com

Mobile: +64 (0)21 274 4810

Website: www.edwards.com

SPONSORS

BRONZE

Haemonetics (NYSE: HAE) is a global healthcare company dedicated to providing a suite of innovated haematology products and solutions for customers, to help them improve patient care and reduce the cost of healthcare. Our technology addresses important medical markets: blood and plasma component collection, the surgical suite, and hospital transfusion services. To learn more about Haemonetics, visit www.haemonetics.com

Karen Chase
Product Specialist (ANZ)

Haemonetics

Email: karen.chase@haemonetics.com

Mobile: +64 (0)27 593 9370

Website: www.haemonetics.com

BRONZE

InterMed Medical, one of New Zealand's largest privately-owned distributors of medical devices, is pleased to present a portfolio of high-quality products at this year's ACS conference. Now in our 38th year of trading in New Zealand, hospitals can be assured of high-quality products, with proven technology from competent and well-trained staff.

Visit our stand to see the recently released I-View™ Video Laryngoscope from Intersurgical, as well as a range of other innovative products used in the anaesthesia field from suppliers such as Timesco and Unisis. We look forward to welcoming you at our stand.

Gemma Keeton
Product Specialist

InterMed Medical Limited
71 Apollo Drive, Albany
Auckland 0632, New Zealand

Email: gemma@intermed.co.nz

Mobile: +64 (0)21 760 112

Website: www.intermed.co.nz

BRONZE

Chris Hughes
Senior Territory Manager –
Respiratory and Monitoring Solutions

Medtronic New Zealand Ltd
Level 3 – Building 5
Central Park Corporate Centre
666 Great South Road, Penrose
Auckland 1345, New Zealand

P O Box 24 303, Royal Oak
Auckland 2140, New Zealand

Email: christina.hughes@medtronic.com
nzsales@medtronic.com

Mobile: +64 (0)21 963 230

Website: www.medtronic.co.nz

As a global leader in medical terminology, services and solutions, Medtronic improves the lives and health of millions of people each year. We use our deep clinical, therapeutic, and economic expertise to address the complex challenges faced by healthcare systems today. Let's take healthcare Further, Together.

Learn more at www.Medtronic.co.nz

BRONZE

Lynda McCree
Hospital Product Specialist

Merck Sharp & Dohme (New Zealand) Limited
Level 3, 123 Carlton Gore Road, Newmarket
Auckland 1024, New Zealand

Email: lynda.mccree@merck.com

Mobile: +64 (0)27 585 7924

Website: www.msd.co.nz

Merck Sharp & Dohme (NZ) Ltd (MSD) was established in New Zealand in 1962 and is a wholly owned subsidiary of Merck & Co. Inc.

In New Zealand, MSD provides innovative medicines, vaccines and biologic therapies across a broad range of therapeutic areas.

MSD is one of the few pharmaceutical companies still conducting clinical trials in New Zealand. Current research programmes include oncology, infectious diseases, endocrinology, neurology, cardiology and vaccines. These trials provide free therapeutic access to hundreds of patients.


AUCKLAND CITY
SYMPOSIUM
JAFA
Joint Anaesthesia
Faculty Auckland
THE UNIVERSITY OF
AUCKLAND
SAVE THE DATE
Saturday, 28 March 2020


BATS on Ice
BETTER ANAESTHESIA
THROUGH SONOGRAPHY
A one-day ultrasound regional anaesthesia workshop
Wednesday, 21 August 2019
Millennium Hotel, Queenstown, New Zealand
Limited places available, for more information go to
www.bats.ac.nz
JAFA
Joint Anaesthesia
Faculty Auckland
FUJIFILM
Value from Innovation
SonoSite


Aspirations INTO Action
2019
COMBINED NEW ZEALAND
ANAESTHESIA ASM + AQUA
AUGUST 21–24, 2019
MILLENNIUM & COPTHORNE HOTELS
QUEENSTOWN, NEW ZEALAND
New Zealand Society of Anaesthetists
ANZCA
Australian and New Zealand College of Anaesthetists
JAFA
Joint Anaesthesia Faculty Auckland
www.nzanaesthesia.com

No Barriers.
More Clarity.

The ClearSight System

A simple, non-invasive approach to monitoring key haemodynamic parameters.

- Stroke Volume (SV)
- Stroke Volume Variation (SVV)
- Cardiac Output (CO)
- Systemic Vascular Resistance (SVR)
- continuous Blood Pressure (cBP)

For professional use. CAUTION: Federal (United States) law restricts this device to sale by or on the order of a physician. See instructions for use for full prescribing information, including indications, contraindications, warnings, precautions and adverse events. Edwards Lifesciences devices placed on the European market meeting the essential requirements referred to in Article 3 of the Medical Device Directive 93/42/EEC bear the CE marking of conformity.

Edwards

Interpretation without Complication

TEG® Interpretation Guidance

Software Module

The new TEG Interpretation Guidance module available with TEG Manager® software facilitates the consistent clinical application of TEG test results. Using customizable alert messages, the software enables you to:

- Simplify interpretation of results
- Standardize treatment decisions according to your institution's algorithms or guidelines
- Remotely view diagnostic data from anywhere in your hospital

TEG Interpretation Guidance—providing actionable information for improved hemostasis management where and when you need it.

To learn more, please contact your local sales representative,
email info.anz@haemonetics.com
or call +61 1800 209 515 (AU) / +64 0800 423 600 (NZ).

For a list of worldwide office locations and contact information, visit www.haemonetics.com/officelocations

HAEMONETICS®

New Product Release

ClearLite™ anaesthetic face masks

A clear vision for the future

The ClearLite anaesthetic face mask available in seven sizes, provides a superior seal with a flexible non inflatable cuff. It is non PVC, phthalate free and available without a hook ring reducing waste.

A clear choice to reduce your impact on the environment

For further information please visit:
www.intersurgical.com/products/anaesthesia/ClearLite

INTERSURGICAL®
COMPLETE RESPIRATORY SYSTEMS

Quality, innovation and choice

Interact with us

www.intersurgical.com

InterMed Medical Limited Free Phone: 0800 333 444 www.intermed.co.nz 71 Apollo Drive, Albany, Auckland 0632 PO Box 33268, Takapuna, Auckland 0740

February 2019

intermed
You. Me. Make a difference.

EVEN WHEN SILENT, YOUR PATIENT SPEAKS.
WE HELP YOU LISTEN.
CEREBRAL & END ORGAN COMPROMISES.

CAPNOSTREAM™ 35
Portable Respiratory Monitor

INVOS™ Cerebral/Somatic Oximeter

Enables detection of regional oxygen desaturation (rSO_2), prompt intervention and improved patient outcomes.[4-6]

BIS™ Brain Monitoring System

CAPNOSTREAM™ 35 Portable Respiratory Monitor

Continuous monitoring of $etCO_2$, respiration rate, and SpO_2.
In virtually any clinical setting.

INVOS™ 7100 Regional Oximetry System

BIS™ Brain Monitoring System

Enables depth of anaesthesia monitoring and improved patient outcomes. Multiple studies have indicated reductions in post-operative delirium.[1-3]

REFERENCES

1. Chan et al-BIS Guided Anesthesia Decreases Delirium etc-J Neurosurg Anesthesiol 2013 v25 p33–42
2. Cochrane Review - Delirium 2016 CD005563_abstract. Interventions for preventing deliriumin hospitalised non-ICU patients (Review) Siddiqi N, Harrison JK, Clegg A, Teale EA, Young J, Taylor J, Simpkins SA
3. Aldecoa et al-ESA Evidence based and Cnsus-based Guideline on Post-op Delirium- Eur J Anaesthiol 2017 v34 p192-214
4. Murkin JM, Adams SJ, Novick RJ, et al. Monitoring brain oxygen saturation during coronary bypass surgery: a randomized, prospective study. *Anesth Analg.* 2007;104:51-8.
5. Slater JP, Guarino T, Stack J, et al. Cerebral oxygen desaturation predicts cognitive decline and longer hospital stay after cardiac surgery. *Ann Thorac Surg.* 2009;87(1):36-44; discussion:44-5.
6. Goldman S, Sutter F, Ferdinand F, Trace C. Optimizing intraoperative cerebral oxygen delivery using noninvasive cerebral oximetry decreases the incidence of stroke for cardiac surgical patients. *Heart Surg Forum.* 2004;7(5):E376-81.

Medtronic Australasia Pty Ltd
2 Alma Road
Macquarie Park, NSW 2113
Australia
Tel: +61 2 9857 9000
Fax: +61 2 9889 5167
Toll Free: 1800 668 670

Medtronic New Zealand Ltd
Level 3 - Building 5, Central Park Corporate Centre
666 Great South Road
Penrose, Auckland 1051
New Zealand
Fax: +64 9 918 3742
Toll Free: 0800 377 807

medtronic.com.au
medtronic.co.nz

Medtronic

EXPERIENCE THE BRIDION EFFECT.

PREDICTABLE.[1] COMPLETE.[2] RAPID.[2]

BRIDION provides complete reversal from neuromuscular blockade.[1,2]

#Reversal of neuromuscular blockade induced by rocuronium or vecuronium. **References: 1.** Blobner M, Eriksson LI, Scholz J, et al. Reversal of rocuronium-induced neuromuscular blockade with sugammadex compared with neostigmine during sevoflurane anaesthesia: results of a randomised, controlled trial. Eur J Anaesthesiol. 2010;27(10):874–881. doi:10.1097/EJA.0b013e32833d56b7. **2.** Jones RK, Caldwell JE, Brull SJ, et al. Reversal of profound rocuronium-induced blockade with sugammadex: a randomized comparison with neostigmine. Anesthesiology. 2008;109(5):816–824.

Bridion® (Sugammadex) is a Prescription Medicine, fully funded under Section H of the Pharmaceutical Schedule from 1 June 2013. Indications: Reversal of neuromuscular blockade induced by rocuronium or vecuronium. **Dosage & Administration:** Immediate reversal of intense block. 16.0 mg/kg IV, three minutes following administration of rocuronium (1.2 mg/kg) in adults, (including: elderly, obese patients, patients with mild and moderate renal impairment and patients with hepatic impairment). Routine reversal of profound block 4.0 mg/kg IV following rocuronium- or vecuronium induced block when recovery has reached 1-2 post-tetanic counts; in adults. Routine reversal of shallow block. 2.0 mg/kg IV following rocuronium- or vecuronium-induced block when recovery has occurred up to reappearance of T2; in adults; 2.0 mg/kg IV following rocuronium in children and adolescents (2-17 years). **Contraindications:** Hypersensitivity to sugammadex or to any of the excipients. **Precautions:** Repeated exposure in patients; respiratory function monitoring during recovery; use for reversal of neuromuscular blocking agents other than rocuronium or vecuronium; coagulopathy; severe renal impairment; severe hepatic impairment; marked bradycardia, use in ICU; hypersensitivity reactions (including anaphylactic reactions); pregnancy (Category B2); lactation; infants less than 2 years of age including neonates; prolonged neuromuscular blockade (sub-optimal doses) and delayed recovery. **Interactions:** Potential identified with toremifene, hormonal contraception. Could interfere with progesterone assay and some coagulation parameters. **Adverse Reactions:** Dysgeusia, prolonged neuromuscular blockade, anaesthetic complication (restoration of neuromuscular function), hypersensitivity reactions varying from isolated skin reactions to serious systemic reactions (i.e anaphylaxis), bronchospasm and pulmonary obstructive events. Severe hypersensitivity reactions can be fatal. Events associated with surgical procedures under general anaesthesia. Isolated cases of marked bradycardia and bradycardia with cardiac arrest. **Marketed by:** Merck Sharp & Dohme (NZ) Ltd, Newmarket, Auckland. Based on Medsafe approved Data Sheet, prepared 22 February 2016, available on www.medsafe.govt.nz.

MSD

bridion® sugammadex

www.acs.ac.nz