



PROBLEM BASED LEARNING DISCUSSIONS AND QUALITY ASSURANCE SESSIONS

The Problem based learning discussions (PBLDs) at this Meeting have been based on both common clinical challenges and on popular demand at previous meetings. They are all 90 minutes in duration and run concurrently to the main scientific program. The Quality Assurance (QA) sessions allow a discussion of real clinical cases among participants from varying backgrounds. The concept was developed at the 2007 Meeting and was extremely popular. All participants are required to bring a case for discussion.

A ticket is required for entry to all PBLD and QA sessions.

Only **ONE** PBLD /QA session will be allocated to each delegate up to the early bird closing date **Friday 19 March 2010** after which all registrants will be emailed with the remaining available sessions and be permitted to make a second choice on a "first come first served" basis. Bookings for PBLD and QA sessions will be as follows:

Online

You should make your PBLD/QA choice while you register on line from the available sessions. If your first selection is already fully subscribed, you can continue to make a selection until a free session is chosen. After **Friday 19 March 2010** all delegates will be notified by email of the remaining available PBLDs and QAs so that a second session can be selected.

Manual registration form

Should you wish to make your selection on paper you must nominate your top 10 preferences (1 – 10) on the form provided. A ticket is required for each PBLD or QA and only **ONE** PBLD or QA will be allocated prior to early bird closing date **Friday 19 March 2010**.

You will be allocated your highest priority from the available PBLD or QA sessions. You will also be emailed with the remaining available PBLD or QA sessions after **Friday 19 March 2010** to allow you to make additional choices via the **ONLINE** registration process.

Cost per PBLD/QA: NZ\$20

Maximum number of participants for all PBLD/QA sessions: 12

Cold and numb

Facilitator: Dr Jennifer Woods

Time: **P1** Saturday 1 May 1030 - 1200

On a winter's night, you are called to the emergency department to help manage a 46 year old man who rolled his truck 6 hours earlier. He has sustained a cervical spinal injury and has a sensory and motor level at C6-7. His temperature is 30°C. The Emergency team want you to transport the patient to the CT scanner.

This PBLD will discuss the issues relevant to a new spinal injury, hypothermia, and the anaesthetic management of spinal patients undergoing surgery.

Management of major pelvic trauma and massive transfusion

Facilitator: Dr Jeremy Hickling

Time: **P2** Saturday 1 May 1030 - 1200

Unstable pelvic fracture is commonly associated with high force major trauma and is associated with a mortality of around 50%. Early resuscitation and fracture management is critical and includes a number of different strategies ultimately aiming to halt haemorrhage and stabilise the fracture. A decision making algorithm will be presented and the anaesthetic implications of these different strategies will be discussed.

Unstable pelvic fractures are also commonly associated with massive blood transfusion. We will discuss the importance and implications of this and the current thinking on optimal blood product ratios. We will also look at massive transfusion protocols and their advantages and disadvantages.

DIY echocardiography: friend or foe?

Facilitator: Dr Robyn Moss

Time: **P3** Saturday 1 May 1030 - 1200

Clinical judgement vs. the echo probe. This PBLD will discuss a number of clinical scenarios with and without supplementary transthoracic echocardiographic studies.



A complicated nephrectomy

Facilitator: Dr Will Young

Time: **P4** Saturday 1 May 1330 - 1500

The elderly patient on your urology list requires a radical nephrectomy for a renal cell carcinoma which extends into the renal vein, IVC and into the right atrium!

This PBLD will discuss the anaesthetic challenges of this case including the need deep hypothermic circulatory arrest, and the post-operative complications this patient faced.

An unexpected intra-operative hypertensive crisis

Facilitator: Dr Brent Waldron

Time: **P5** Saturday 1 May 1330 - 1500

You are the anaesthetist in a regional hospital. Shortly after induction of anaesthesia for a lymph node biopsy, the patient develops uncontrolled hypertension. This is complicated by marked ST segment changes and you suspect an undiagnosed pheochromocytoma. The theatre staff is unable to locate the phentolamine. This PBLD will focus on intra-operative management of hypertension and your management of the patient in the ICU afterwards.

Analgesia options for major upper abdominal surgery

Facilitator: Dr Gavin Pattullo

Time: **P6** Saturday 1 May 1330 - 1500

Anaesthetists faced with the dilemma of providing effective analgesia for a patient undergoing major upper abdominal surgery can take one of three options; thoracic epidural (TEA), intrathecal morphine or PCA. This PBLD session will firstly aim to summarise the upside and downside of each option in an unbiased manner.

The second component of this discussion will focus on the practical aspects of TEA. With data emerging on the potential morbidity and mortality benefits of TEA - through the reduction in both opioid and anaesthetic agent that is afforded by its use - there is a need to ensure that this 'dying art' is not lost to the next generation. In an endeavour to reverse this trend, techniques to ensure that your TEA is optimised will form a significant component of this session.

A gynaecological patient, PONV and a mobile surgical bus

Facilitator: Dr Malcolm Stuart

Time: **P7** Saturday 1 May 1530 - 1700

You are the anaesthetist on the mobile surgical bus and the first patient is a 38 year old woman for a laparoscopic sterilisation.

This PBLD will discuss management strategies to prevent PONV, and the issues of isolation and the remote location.

The anorexic patient needing emergency orthopaedic surgery

Facilitator: Dr Nathan Kershaw

Time: **P8** Saturday 1 May 1530 - 1700

You are required to anaesthetise a young woman for repair of a compound humeral fracture who has anorexia nervosa. This PBLD will discuss anorexia nervosa and the associated problems, and the anaesthetic management of this patient.

Using TEG to assess the bleeding patient

Facilitator: Dr Amanda Dawson

Time: **P9** Sunday 2 May 1030 - 1200

In keeping with the 2010 ASM meeting theme, "How meets Why", this PBLD session will include practical hands on running of the Haemoscope TEG and case based discussion around the practicality, timeliness and clinical management impact TEG can make in your bleeding patients. We will review the components of TEG, what they can and can't tell us about the state of the coagulation system and the impact of various pharmacologic agents on the interpretation of TEG. Whether you use TEG everyday or have never seen one, we hope this session will be fun, interactive and above all else clinically useful.

Obesity and obstetric anaesthesia

Facilitator: Dr Nolan McDonnell

Time: **P10** Sunday 2 May 1030 - 1200

A G3P1 180 kg (BMI 62) parturient has been admitted to your labour suite for an induction of labour for pre eclampsia. The obstetric team has requested your review and epidural analgesia for labour. This PBLD will discuss the implications of obesity for the parturient, obstetrician and anaesthetist and provide practical tips in the management of these patients in both the labour ward and operating theatre.



Critical incident monitoring from ANZTADC

Facilitator: Dr Martin Culwick

Time: **P11** Sunday 2 May 1030 - 1200

WebAIRS is a free program produced by ANZTADC and is jointly produced by ANZCA, the ASA and the NZSA. This PBLD will include using the program to enter a critical incident and how to apply to use this free program. The results of the project up until April 2009 will be presented and discussed. Some critical incidents will be presented during the session for some "hands on" analysis experience.

Acute airway compromise....

Facilitator: Dr Paul Currant

Time: **P12** Sunday 2 May 1330 - 1500

You are called urgently to the general surgical ward to assess an elderly gentleman with acute upper airway compromise following attempted nasogastric tube insertion for small bowel obstruction. He is known to have Wegener's granulomatosis with periglottic involvement. This PBLD will discuss the pros and cons of the various management options for upper airway obstruction and their relative merits in different clinical situations.

The patient with cardiac failure requiring a laparotomy

Facilitator: Dr Andrew Gardner

Time: **P13** Sunday 2 May 1330 - 1500

You are asked to anaesthetise a patient with a history of cardiac failure who requires an urgent laparotomy for a perforated duodenal ulcer. From the end of the bed, the patient clearly appears to be in respiratory distress.

Topics for discussion:

1. What are the common causes of heart failure?
2. What medications are patients with heart failure likely to be taking, and what are their implications for anaesthetists?
3. If anti-coagulated, how would you reverse this?
4. What investigations would you ask for preoperatively?
5. If the patient has a pacemaker – how will this affect your management of the patient?
6. What interventions can be arranged to improve the patient's status preoperatively?
7. What would be your strategy for the induction and maintenance of anaesthesia?
8. Where would you plan to place this patient postoperatively?
9. What would your plan be for pain management postoperatively?

Learning objectives and references for this PBLD will be provided prior to the session.

Would a GA be easier?

Facilitator: Dr David Belavy

Time: **P14** Sunday 2 May 1330 - 1500

On Sunday evening you have two unintubated ICU cases that need surgery. The first is an obese man with limited neck extension, chronic renal failure, ischaemic cardiomyopathy (EF 10%) and sepsis on inotropes needing an infected forearm AV fistula drained. His subclavian vein is stenosed so there are dilated veins all around his brachial plexus. How will you approach his brachial plexus? What will you do if the block fails? The second is a woman with unstable C2, C6 and C7 fractures but no neurological changes. She has a compound tib-fib fracture that needs washout and external fixation. What regional anaesthetic technique would you use? What will you do when she develops symptoms of local anaesthetic toxicity?

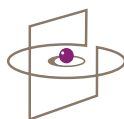
The morbidly obese patient presenting for elective laparoscopic cholecystectomy

Facilitator: Dr Robyn Chirnside

Time: **P15** Sunday 2 May 1530 - 1700

You have agreed to cover a colleague while he is off to another conference, and the surgeon warns you that he has 'Trish' last on his list – an obese 45 year old for a laparoscopic cholecystectomy who he thinks you should see earlier rather than later. You organise for Trish to be assessed a week earlier than normal, and she walks into preadmission with the aid of a stick, with audible expiratory wheeze and a respiratory rate of 34. She is morbidly obese with a BMI of 67, a husky voice, failed trials of CPAP and BIPAP, suffers from chronic back pain, hypertension, and is a type 2 diabetic.

Where do we start? What tests does she need? What drugs will I use? Where does she go post op? This PBLD will provide a practical look at the increasingly frequent problem of morbidly obese patients.



Peripheral regional anaesthesia for lower limb surgery

Facilitators: Dr Alwin Chuan and Dr Minh T. Tran

Time: **P16** Sunday 2 May 1530 - 1700

An 80 year old nursing home patient with severe COPD and heart disease requires a pin and plate for his fractured neck of femur. He is on clopidogrel for his coronary stent. Your enthusiastic registrar just read up on ultrasound guided fascia iliaca blocks and was hoping that you will supervise her.

A 17 year old patient is to undergo a distal tibial lengthening procedure to correct a leg varus deformity caused by complications from osteomyelitis. She has chronic pain issues, and is apprehensive and tearful. The surgeon requests the best possible post-operative analgesia, and was wondering if you can insert a continuous block catheter.

This PBLD will discuss the options for peripheral blocks in lower limb procedures, including hip, knee, and ankle surgery, by using case scenarios similar to those described above.

Specific techniques will be covered, including femoral, obturator, fascia iliaca, different approaches to sciatic nerve blockade, and catheter infusions. We will discuss clinical pearls to help improve success rates and minimise complications, and the integration of ultrasound guidance in peripheral nerve blockade of the lower limb.

A patient on anticoagulants requiring emergency surgery

Facilitator: Dr Timothy Grice

Time: **P17** Sunday 2 May 1530 - 1700

A 60 year old male initially presents to the Emergency Department with chest pain at midnight. The patient is well known to the ED with a history of unstable angina, and alcoholism. He is non-compliant with medications and is currently homeless.

The medical team commence treatment with aspirin, clopidogrel (Plavix) and therapeutic enoxaparin (Clexane) without any improvement in his symptoms. A subsequent CXR reveals a pneumomediastinum and the patient is given a provisional diagnosis of a ruptured oesophagus.

At 1400h the thoracic surgeon wishes to bring the patient straight to theatre to perform a laparotomy (and also possibly a thoracotomy).

Will this patient need any treatment prior to theatre for his recent anticoagulation?

The issues that this PBLD will discuss include Clopidogrel and how to reverse its effects, and tests to check platelet function.

Neuroanaesthesia for elective brainstem surgery

Facilitator: Dr Hamish Gray

Time: **P18** Monday 3 May 1030 - 1200

Microvascular decompression (MVD) of the Trigeminal (Vth) nerve is a common neurosurgical procedure performed for intractable facial pain (trigeminal neuralgia) where a loop of artery is lifted off the trigeminal nerve in the brainstem.

However there are also other MVD procedures that can be performed in the brainstem for the relief of a variety of symptoms usually related to mechanical compression of cranial nerves by ectatic loops of artery. In particular there has been interest in MVD of the medulla where the IXth and Xth cranial nerves enter the brainstem blood pressure regulatory centre.

This PBL session will examine the peri-operative management of a 75 year old woman presenting for MVD who has autonomic failure secondary to the left vertebral artery compressing the medulla. We will discuss the current evidence for this procedure, anaesthetic strategies as well as aspects of the multidisciplinary approach required to successfully manage these challenging cases.

Participants will be sent some pre-PBL reading!!!

A paediatric anaesthetic triplet

Facilitator: Dr Andrew Sharples

Time: **P19** Monday 3 May 1030 - 1200

A 6/52 boy with history of milk reflux treated with ranitidine develops increasingly vigorous vomiting. How do you want to assess him before his proposed pyloromyotomy?

A 5 year old boy with a supracondylar fracture of his elbow presents from the emergency department. He has no pulse in his hand and needs to undergo surgery urgently. What is the next step?

A mother and her 10 year old daughter are arguing. The daughter is refusing to have her outpatient dental anaesthetic. How do you proceed?

Peri-operative pain management in the opioid dependant patient

Facilitator: Dr Lewis Holford

Time: **P20** Monday 3 May 1030 - 1200

You are asked to anaesthetise a 34 year old former IV drug user on maintenance methadone for surgery following an MVA. This session will consider the options for peri operative pain management in the context of a patient on maintenance opioids such as methadone or buprenorphine.



Management of the collapsed obstetric patient

Facilitator: Dr Nolan McDonnell
Time: **P21** Monday 3 May 1030 - 1200

You are the anaesthetist covering the birthing suite when you are called to a medical emergency in one of the birthing rooms. On arrival you find an unconscious woman and a brief assessment shows her to have no apparent cardiac output. This PBLD will discuss the potential causes of collapse and cardiac arrest in obstetric patients, the key differences in the management of the collapsed obstetric patient and the role of multidisciplinary training in obstetric crisis management.

My patient won't wake up

Facilitator: Dr Graham Sharpe
Time: **P22** Tuesday 4 May 1030 - 1200

A six week old girl presents for semi acute inguinal hernia repair. She was born at term after a normal pregnancy, is fully breast fed and now weighs 5kg. Pre-operative evaluation reveals no problems apart from a right inguinal hernia. She is anaesthetized with Propofol 25mg, Mivacurium 1mg, and Oxygen/air/sevoflurane.

She is intubated easily with a size 4.0 uncuffed tube. A caudal is placed: 4 ml of 0.2% bupivacaine with fresh adrenaline 1:200 000, via a 22g IV cannula with negative aspiration. Intra-operatively she receives IV saline 10ml/kg. The surgeon checks the left side and repairs a second hernia at the same time. Operative time is 45 minutes.

At the end of the procedure, the sevoflurane is discontinued. She does not rouse. Fifteen minutes later she remains completely unresponsive. Examination reveals a fixed and dilated left pupil.

How do you proceed?

This PBLD will explore the management of the non-awakening paediatric patient.

Points for discussion:

1. Immediate management
2. Investigations
3. Involvement of non anaesthetic colleagues
4. Dealing with the parents
5. Long term follow up.

Having fun with spinal surgeons...

Facilitator: Dr Tim Wright
Time: **P23** Tuesday 4 May 1030 - 1200

Major spinal surgery presents many challenges for an anaesthetist. Using the case of a thoracic revision of a lumbar fusion for progressive back disease, this PBLD will touch on many of the difficulties commonly presenting during spinal surgery and provide the attendee with practical strategies to face these challenges.

You are called to the emergency department to help with a difficult airway....

Facilitator: Dr Craig Birch
Time: **P24** Tuesday 4 May 1030 - 1200

A 50 year old man has been involved in a head-on road traffic accident. He had a GCS of 13 on arrival to the Emergency Department. His vital signs were otherwise stable. The Emergency Department team decided to intubate him. He was induced with Thiopentone 350mg and Suxamethonium 100 mg and they describe a Cormack/Lehane grade 4 view. They are bag-mask ventilating him and just keeping his SpO₂ at 90%. What do you do?

Autistic children with educated parents

Facilitator: Dr Annette Turley
Time: **P25** Tuesday 4 May 1330 - 1500

A child on your dental list has an autistic spectrum disorder. Her parents are a well-educated professional couple who have flagged problems at the preadmission appointment with previous anaesthetic management. This PBLD will look at some of the issues that autism poses for the anaesthetist and the challenges of patients/parents who have access to many sources of information with varying levels of scientific basis.

Acid-base and fluid management in a patient for a laparotomy

Facilitator: Assoc Prof David Story
Time: **P26** Tuesday 4 May 1330 - 1500

Using the scenario of an elderly patient with bowel ischaemia and lactic acidosis presenting for an emergency laparotomy, this PBLD will discuss issues related to acid-base physiology, individualising fluids and the effects of intravenous fluids.



Playing Sherlock

Facilitator: Dr Paul Templer

Time: **P27** Tuesday 4 May 1330 - 1500

A bad thing has happened: a patient has died and now you have been asked to head the SAC 1 investigation.

- What does SAC 1 mean?
- How do you investigate something?
- Who do you blame?
- How long should it take?
- How do you get real change?

A basic guide to investigation of serious adverse events lead by Dr Paul Templer (Faculty Member National Incident Monitoring team).

Learn how before you have to do a real one.

A child with arthrogyposis requiring orthopaedic surgery

Facilitator: Dr Chris Smit

Time: **P28** Tuesday 4 May 1530 - 1700

You see a 9 year old girl on the orthopaedic ward with her parents. She is due to have release of her left elbow that afternoon. She has Arthrogyposis Multiplex Congenita. While talking with you she becomes tearful and tells you she "hates the mask". She is worried about being sore afterwards. You note she weighs 18kg. The left arm is fixed in full extension at the elbow and severely internally rotated at the shoulder.

This PBLD will deal with expected difficulties both intra-operatively and in the post-operative period.

Points for discussion:

1. What potential anaesthesia difficulties do you anticipate?
2. How will you plan to address these?
3. If a regional technique is part of your analgesia plan, what risks do you discuss with the child and parents during consent?
4. What techniques are available to maintain the regional block post-operatively

Learning objectives for this PBLD will be provided prior to the session.

Management of malignant hyperthermia

Facilitator: Dr Elaine Langton

Time: **P29** Tuesday 4 May 1530 – 1700

You are asked to anaesthetise a 25 year old man with suspected appendicitis.

During the anaesthetic you suspect malignant hyperthermia.

The group will discuss the presentation of malignant hyperthermia and current recommendations for managing this patient in theatre and in the postoperative period.

Diagnosis and testing of other family members will be explained, as well as how to manage a malignant hyperthermia susceptible patient for elective or emergency surgery.

Maxillofacial trauma

Facilitator: Dr David Moore

Time: **P30** Tuesday 4 May 1530 - 1700

A 43 year old man, one week post high-speed motor vehicle accident, is listed for ORIF of complex facial fractures.

This PBLD will examine the airway management options when conventional oral and nasal intubations are precluded by the pattern of injury, and the planned surgery.

It will also consider some of the other problems likely to be encountered in such a patient at this stage following major trauma.

Triage - A management tool for a mass casualty incident

Facilitator: Dr John Moloney

Time: **P31** Saturday 1 May 1530 - 1700

A bus full of tourists slides off the road whilst returning from a day trip to Mt. Hutt. You are following behind in your rented 4 wheel drive, with chains. After parking safely and alerting the emergency services, you and 3 others from another car clamber down the embankment towards the overturned bus. As you approach, you see a small number of people climbing out through broken windows, and you can hear the screaming of children and adults from within the wreckage. After making the scene as safe as possible, what are the next priorities in managing all of the injured, while awaiting further help?



QUALITY ASSURANCE (QA) SESSIONS

Quality Assurance (QA) sessions allow a discussion of real clinical cases among participants from varying clinical and geographical backgrounds. All participants are requested to bring their own case for discussion. These sessions allow a facilitated small group discussion on a wide range of clinical scenarios that have been interesting, challenging or controversial.

Note that three of the QA sessions will focus on specific issues. These are Paediatric Anaesthesia (QA session 1), Pain (Acute or Chronic QA session 7) and Obstetrics/Gynaecology (QA session 8).

QA Session 1: PAEDIATRICS

Facilitator: Dr Indu Kapoor
Time: Saturday 1 May 1030-1130

QA Session 2

Facilitator: Dr Tamsin Dovell
Time: Saturday 1 May 1330-1430

QA Session 3

Facilitator: Dr Peter Tobin
Time: Saturday 1 May 1530-1630

QA Session 4

Facilitator: Dr Nick Abbott
Time: Sunday 2 May 1030-1130

QA Session 5

Facilitator: Dr Lisa Chapman
Time: Sunday 2 May 1330-1430

QA Session 6

Facilitator: Dr Lara Hopley
Time: Sunday 2 May 1530-1630

QA Session 7: ACUTE AND CHRONIC PAIN

Facilitator: Assoc Prof Pamela Macintyre
Time: Tuesday 4 May 1030-1130

QA Session 8: OBSTETRICS AND GYNAECOLOGY

Facilitator: Dr Jack Hill
Time: Tuesday 4 May 1330-1430

QA Session 9

Facilitator: Dr Gary Hopgood
Time: Tuesday 4 May 1530-1630

BREAKFAST SESSIONS

Breakfast served from 0700. Session commences at 0715.

Sunday 2 May 2010

The title of this session will be confirmed in early 2010

Presenter: Gerard Manecke
Cost: NZ\$10



Edwards

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Neuromodulation: Peripheral and spinal cord stimulation in pain management

Presenter: Dr Marc A Russo
Cost: NZ\$10

Monday 3 May 2010

Clinical implications of Bridion (Sugammadex)

Presenter: To be confirmed
Cost: NZ\$10

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LUNCHTIME SESSION

Baxter will sponsor a one hour lunchtime session. The details of this session (including date, presenter and content) will be confirmed early in 2010

