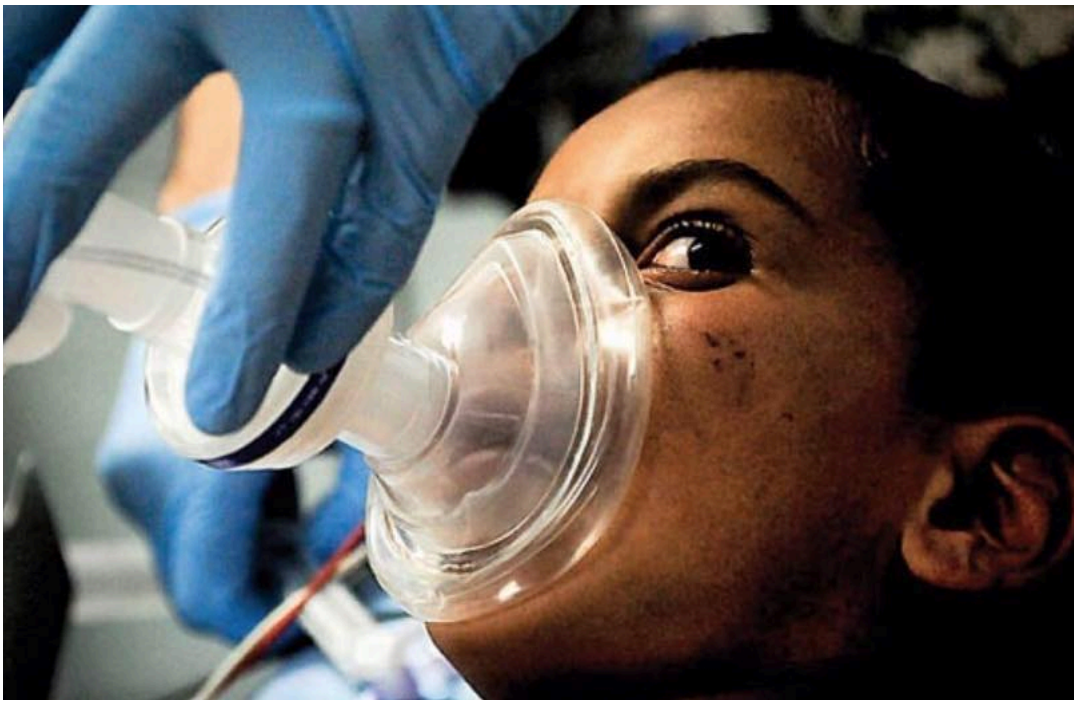
RURAL ANAESTHESIA DOWN UNDER



Inaugural Edition

Since creation in Dec 2017, the Rural Anaesthesia Down Under Facebook group has grown to over 300 rural anaesthetists. This inaugural edition celebrates the diversity of rural GP anaesthetists in Australia. Please share this copy with your colleagues.

The closed Facebook group "Rural Anaesthesia Down Under" exists to support GPA's to provide quality anaesthetic care in their communities. This is a space for breaking down traditional silos (regional health service, States, Colleges) and generating cohesion amongst GPAs. Our aims are simple :

Clinical Support and Education
- *Promulgation of new info and techniques*
- *Industrial advocacy at the macro level*
- *Workforce research to support the above*

Peer Support
- *Sharing interesting cases*
- *Advice on up skilling opportunities*
- *Breaking down the silos between health services, States & Colleges*

Creating Cohesion amongst GPAs & Driving Quality in Practice
- *Knowledge translation and continuous improvement*
- *Audit of rural practice*

The Rural Anaesthesia Down Under group has it's roots in FOAMed and the notion of collaboration with free-sharing of information.

We are independent of traditional boundaries, medico-political divides, pay-per-view firewalls etc. We are all GPAs and believe that as such United We Stand

Greg Coates

Peter Gilchrist

Tim Leeuwenburg

Amanda Brownlow

Casey Parker

Scott Lewis

Jonathan Ramachenderan

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More about "Rural Anaesthesia Down Under" & Facebook

We live in a connected world, with the entire global knowledge available to us 24/7 via the power of the internet. Yet despite that we are potentially isolated as rural GP anaesthetists - we may be constrained by silos of our local health service, our State, our College and whether accredited under JCCA or another body. At a basic level, we are not even sure how many GP-anaesthetists there are in Australia, their demographics and distribution, the volume of anaesthetic work they are doing nor their safety record

The past few years have seen changes in the CPD requirements for GP-anaesthetists (discussed in their edition by Greg Coates, p8) as well as the commitment by ANZCA to a new Diploma in Anaesthesia - an exciting development, but which needs active engagement by GPAs via their representative bodies to ensure the final product is suitable.

The closed Facebook group 'Rural Anaesthesia Down Under' allows GPAs to interact and share experiences independent of traditional silos. We are you - fellow GPAs who wish to connect, to share and to ensure that we are represented from the grassroots up. A melting pot or 'snapshot' of the profession, which can be used to feed information to our representatives, whether ACRRM, JCCA, RACGP or RDAA.

So far the RADU group has just under 300 members - a significant section of the estimated 450+ GPAs working in Australia. Not everyone uses Facebook or Social Media - we understand that! But please encourage your colleagues to consider joining the '*Rural Anaesthesia Down Under*' group on Facebook....or at least subscribe to the newsletter. We hope to have quarterly update issues to inform GPAs wherever they are based, in the spirit of FOAMed (free open access medical education).

Join the Rural Anaesthesia Down Under group on Facebook

Using Web 2.0 & Social Media to Connect GPAs

How to Join?

- *Register on Facebook*
- *search for the 'Rural Anaesthesia Down Under' group (closed group - members only)*
- *Send a 'join' request with details of who you are, where work and credentials*
- *WELCOME TO THE "RURAL ANAESTHESIA DOWN UNDER" GROUP*

Diploma Update

As many of us are aware, a new Diploma of Anaesthesia is coming soon. Whilst welcomed by the Colleges, there is still some angst over overall governance, over the name, and over contentious issues such as Minimum Volume of Practice, Paediatric Limit etc. As such it's vital for grassroots GP-anaesthetists to be aware of what is proposed and to ensure their voice is heard via College reps.

From the Chair of the ACRRM Rural GP Anaesthetist Working Group, Dr Neil Beaton :

"There's a bit of a hold up in the Diploma project at Board level so it might be best to wait until the Boards and Councils of Colleges meet and agree on a way forward. In the meantime JCCA and ACRRM PDP and JCCA training continue as previously

In April a webinar will be held by RACGP FRM to discuss the Diploma which I hope to get to on line - I would prefer a united front from the RGAs and two colleges . All RGAs (of all denominations) are invited to attend the webinar. For face to face attendance there is a catering charge as advertised. Issues that remain unresolved for ACRRM include:

- *Governance partnership and ownership of Diploma (this is a key issue)*
- *Future of the JCCA*
- *Name of Diploma*
- *Transition of existing RGA and GPAs to Diploma status*
- *Volume of practice controversy*
- *Paediatric training safety and age limits*

Nothing new - negotiations take time and patience and it is important to get this right. ACRRM still supports a Diploma under the right circumstances to strengthen and support the work done through JCCA to date"

And from the RACGP, Dr Stuart Prosser :

"I think the key point is that we need to use forums and working groups to develop our voice and make sure our views are heard (and taken on board). We can not be passive and allow decisions to be made without our opinions being expressed."

RACGP & ACRRM GPA networking night :

An inaugural GP Anaesthetists networking night is being held on the 17th April at RACGP house in Melbourne. The main aim of the night is to get GP anaesthetists together and begin talking about common, topical issues. Currently this particularly relates to ANZCAs proposal to develop a Diploma. The meeting is being facilitated by the RACGP but is intended for all GPAs, regardless of college affiliation. You can either attend face to face or via Webinar. Attendance at the discussion forum from 6pm-7pm AEST is free. Those attending face to face are encouraged to stay for a light meal and informal networking from 7pm-8pm AEST. Attendance at the networking function costs $55 for RACGP members and $75 for non RACGP members. Please register your interest to attend with: Ms Kirstie Perry Tel: 03 8699 0343 Email: Kirstie.Perry@racgp.org.au or via racgp.org.au

Pre-reading will be sent out via email to all those who register. We encourage questions/concerns to be sent in prior to the night so we can generate commons themes to guide the discussion.

The GPA Networking night may be our best shot to present a unified voice on the issue of future JCCA and Diploma governance. Look forward to seeing you there.

- Dr Pete Gilchrist, Dr Ayman Shenouda and Dr Stuart Prosser

Rural Anaesthesia Journal Club - via the BroomeDocs Podcast & Blog

The Broome Docs podcast is perhaps the quintessential rural docs resource for all that's good in FOAMed, with an emphasis on remote emergency medicine and anaesthesia. It's always worth a trawl through the archives for well-researched and articulated goodies. The March 13th podcast is an exhaustive review of topics (summarised below) - have a listen as Casey Parker and guest Alex Harris discuss the latest literature and their own experiences as bush anaesthetists. Key topics include:

International Guidelines for Vasopressors in LUSCS

- Use them and use them as a prophylactic infusion, not rescue bolus
- Alpha-blocker 1st line, most data for phenylepherine
- Remember to displace the fundus and use fluids too
- Maintain target > 90% starting BP
- Avoid tachy- or bradycardia
- Think carefully if pre-eclampsia or heart disease

MBRRACE Triennial Mortality Audit

- Start CPR / Resus early if no output, pulse checks unreliable
- In massive bleeds – keep them intubated until Resus completed
- Only use a 7.0 ETT or smaller in obstetric resus

The effect of neuromuscular blockade on efficiency of face-mask ventilation

- Should a 'test-ventilate be given before administration of paralysing agent?
- Paralysis makes it much easier to ventilate "hard to bag" patients
- Difficulty bagging may be due to Rocuraemia!

Sugammadex Sim Case

In a simulated CICO scenario where teams had to reverse Rocuronium with Sugammadex

- they made a lot of errors
- the time to reversal was around 10 minutes
- If you are using this as a plan, you need to drill it and premeditate it!

Ketamine dosing and side effects

- Nausea / vomiting is around 8%
- Serious agitation ~ 1-2 %
- IV is better than IMI for sedation
- Optimal starting dose is 1.5- 2.0 mg IV
- Anecdote is to use it as a slower push, not a bolus
- High doses (> 3.5 IMI or 2.5 mg/kg IV) resulted in more "badness"

Gastric ultrasound may allow us to visualise true "fasting status" in the future

- Relatively simple scan
- Not quite ready for prime time, but a glimpse into the future?
- Try it out but stay safe by not changing your practice yet….

Access the full references, podcast & online discussion at http://broomedocs.com/2018/03/rural-anaesthesia-journal-club/

How young is too young? The APRICOT study & implications for GPAs

There's a lot of talk out there at the moment re: the move to a new Diploma of Anaesthesia. Questions remain around the name, the governance and tripartite representation moiety, the threat of volume of practice requirements...and the ever-vexed issue of a 'minimum age' for paediatric anaesthesia.

Most GPAs received a 'minimum age' cut off as part of either award of the JCCA or via ongoing Hospital credentialing. Is this going to change?

Here Dr Pete Gilchrist walks us through the APRICOT study....

Anaesthesia PRactice In Children Observational Trial (APRICOT)

***Lancet Respir Med* 2017:** Published **Online** March 28, 2017 http://dx.doi.org/10.1016/ S2213-2600(17)30116-9:
See also o**nline commentary at** http://dx.doi.org/10.1016/

APRICOT was a prospective study via 261 centres in 33 European countries, looking at the incidence, nature and outcome of severe critical events (SCEs) in children undergoing general anaesthesia. A SCE was defined as a respiratory, cardiac, allergic or neurological complication that required immediate intervention and that led to, or could have led to, major disability or death.

General Results

Over a 9 month period in 2014/15, 31,127 anaesthetics in 30,874 children were included in the trial. Children had a mean age of 6.35 years

Total SCEs	5.2%	(95% CI = 5-5.5%)
Respiratory SCE	3.1%	(95% CI = 2.9-3.3%)
CV instability	1.9%	(95% CI = 1.7-2.1%)

The all cause 30 day in hospital mortality rate was 10/10,000 (0.1%). ***None of the reported deaths were anaesthesia related.***

Age, medical history and physical condition were major risk factors for SCEs as was inexperience of the anaesthesiology team, especially in managing very ill or very young patients. Conversely, there was a beneficial effect of years of experience of the most senior anaesthesia team member irrespective of the type of anaesthesia institution or provider.

Results did not show any difference in the incidence of SCEs when comparing the size or composition of the anaesthesia team.

Not surprisingly, SCEs occurred significantly more frequently with higher ASA status:

ASA I	3.5%
ASA II	5.7%
ASA III	9.0%
ASA IV and V	15%

Authors note the extreme variability in anaesthesia practice in Europe, with the use of numerous drug combinations and anaesthesia techniques.

Age

The incidence of CV and respiratory SCEs was significantly higher in neonates 0-1 month and infants 1 month – 1 year. Respiratory SCEs drop off significantly above 3 years and continue to drop into adulthood. CV SCEs drop off markedly above 1 year & remain stable until age 11, after which they increase again.

Age is considered as a continuous variable for respiratory SCEs with a decreasing risk of 12% for each year of age.

Respiratory SCEs

There was no evidence for an effect of the type of health institution or anaesthesia team on the frequency of respiratory SCEs. There was weak evidence for the protective role of an experienced anaesthesiologist (1% reduction in frequency per year of experience).

Timing of Respiratory SCEs				
n=	368	371	29	208
SCE	Laryngospasm	Bronchospasm	Aspiration	Stridor
Induction	35%	29.5%	41.9%	-
Maintenance	18.2%	24.7%	25.8%	-
Awakening	43.6%	41.7%	25.8%	70%
Post Op	3.2%	4%	6.5%	30%

Anaesthesia management has an "important" effect on the incidence of respiratory SCEs. Specifically, inhalation induction and airway management (ie use of ETTs or supraglottic devices) were associated with significantly higher frequency of respiratory SCEs.

Snoring was a risk factor for respiratory SCEs which appeared to be independent of ENT surgery.

Cardiovascular SCEs

Cardio vascular risk was significantly higher for surgical procedures as compared to non-surgical procedures. For example cardiac surgery relative risk 16.92, cardiac catheterisation relative risk 3.2. Analysis confirmed significant increase in CV SCE frequency with increasingly poor physical condition and a protective role of an experienced anaesthetist (2% reduction in frequency per year of experience).

Timing of CV SCEs	n= 549
Induction	21.9%
Maintenance	69.4%
Awakening	4.9%
Post Op	3.8%

Weak evidence suggested a relationship between the performance of low volumes of paediatric anaesthesia cases and higher incidence of cardiac arrest. NB: CV SCEs included bleeding, arrhythmia (predominantly VF, VT and bradycardia) and hypotension. Hypotension and arrhythmia made up 75.4% of CV SCEs.

Food for thought – what does this mean for rural anaesthesia?

1: The frequency of SCEs in paediatric anaesthesia is significant, at more than 1 SCE in every 20 cases. Training and ongoing CPD of GPAs who perform paediatric anaesthesia must include ensuring competence in the management of these common SCEs.

2: This study suggests and recommends the delivery of elective anaesthesia to children below 3-3.5 years of age in specialised paediatric anaesthesia centres. This will understandably be contentious in Australia.

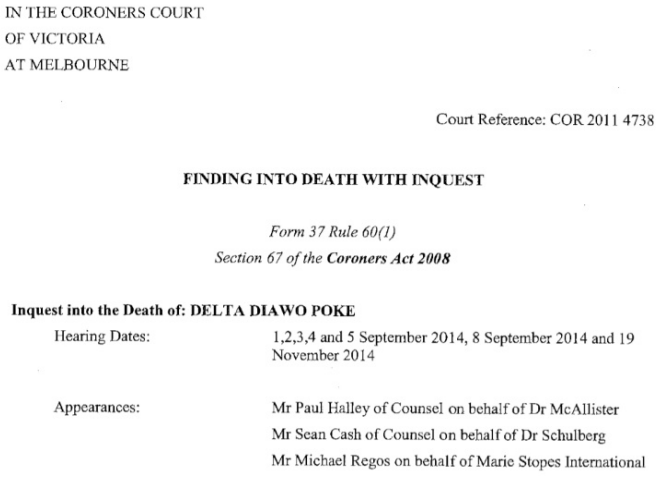
3: A strong focus on pre-anaesthetic case selection is implied by the research to identify; risk factors, ASA classification, and sensitised airways. Sensitised airways include children who snore, are passive smokers or have a history of prematurity.

Dr Pete Gilchrist, South Australia

"Delta Poke" and the consequent JCCA CPD Requirements for 2017-2019

Most of you should be aware of the new JCCA's CPD requirements for GPAs this triennium. So, let us have a look at the tragic coroner's case that led to these changes. Oh, and take a seat. This is confronting reading…

Way back in Dec 2011, a 42yr old international student from Papua New Guinea presented for a 21/40 termination at a day surgery suite in the East of Melbourne (the only facility in Victoria at the time performing such procedures).



IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

Court Reference: COR 2011 4738

FINDING INTO DEATH WITH INQUEST

Form 37 Rule 60(1)
*Section 67 of the **Coroners Act 2008***

Inquest into the Death of: DELTA DIAWO POKE

Hearing Dates:	1,2,3,4 and 5 September 2014, 8 September 2014 and 19 November 2014
Appearances:	Mr Paul Halley of Counsel on behalf of Dr McAllister Mr Sean Cash of Counsel on behalf of Dr Schulberg Mr Michael Regos on behalf of Marie Stopes International

The first morning saw the woman have an uneventful preliminary anaesthetic for insertion of cervical dilators. The next morning, she underwent further cervical ripening interventions. That afternoon, she walked into theatre for the definitive procedure. A pre-anaesthetic consultation was not done due to "language difficulties" (although the patient was known to have had no trouble speaking English).

Whilst preparing for anaesthesia, using a Hudson mask to preoxygenate, there was difficulty obtaining an SpO2 reading. In spite of this, the anaesthetist proceeded with the induction using midazolam 5mgs, fentanyl 100 mcgs and propofol 100 mgs. There was no cardiac monitor available in the theatre. A Guedel was inserted but no definitive airway was used. She was then moved into lithotomy and the procedure commenced. The surgeon noted the patient's blood was dark and simultaneously the anaesthetist had difficulty finding a pulse. CPR was commenced including intubation and adrenaline. She was transferred to Box Hill Hospital and died there.

The GP anaesthetist involved in this case obtained a DA in the UK in 1991 and was accredited with the JCCA (even though he did not undertake any known anaesthetic CME in recent years).

Read more at http://www.coronerscourt.vic.gov.au/resources/d242e0a6-f945-4f6f-888f-d127253640b0/deltadiawopoke_473811.pdf

Can you imagine finding yourself conducting an elective GA in the manner described above?

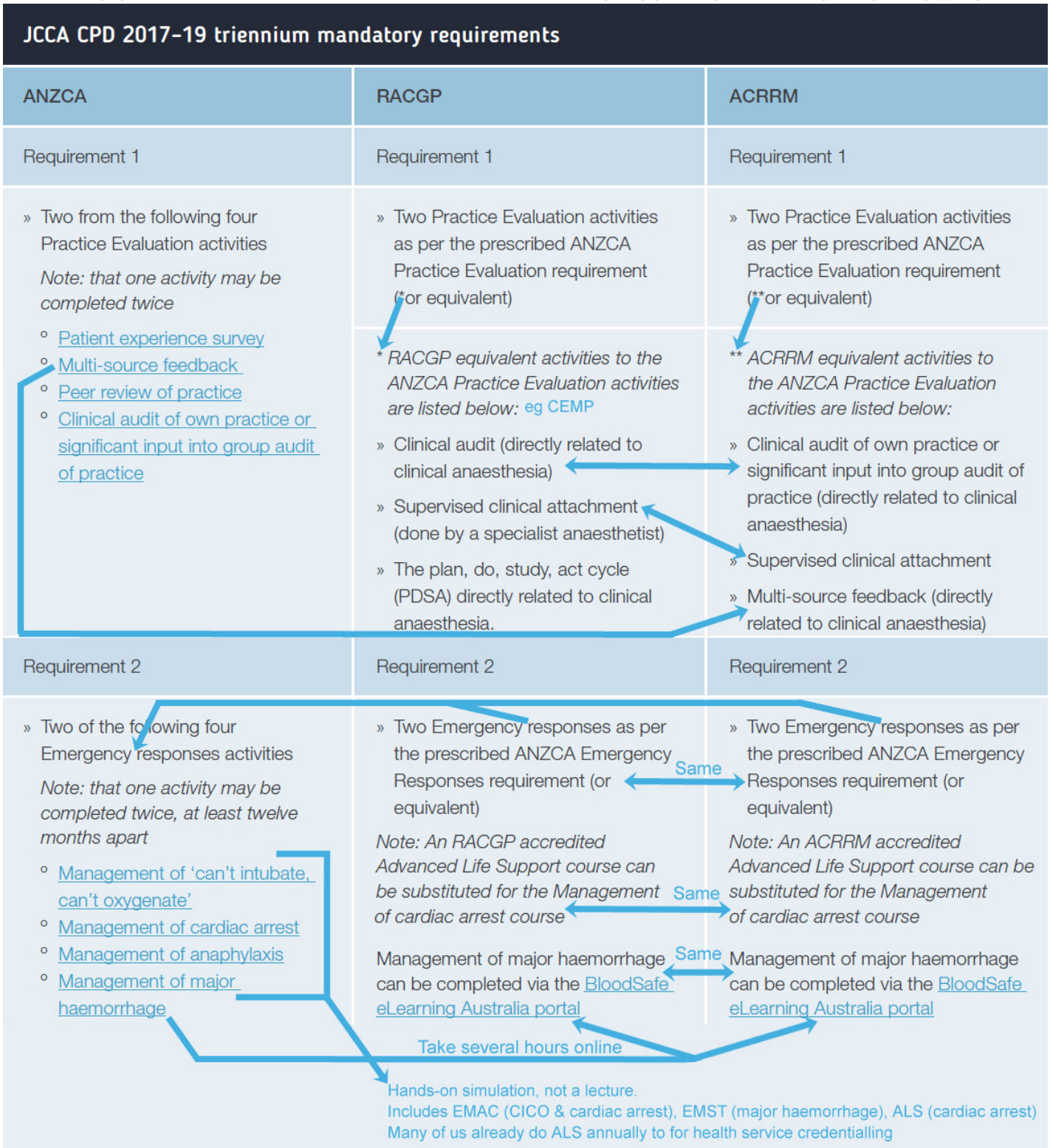
Many of us have been challenged by poor facilities, faulty equipment, poorly trained nurses, clerical errors and uncooperative patients. Its tough out there to stand your ground. It takes guts to demand quality, competence, vigilance and safety (especially in the under-regulated and hyper-competitive private sector). But surely this GPA's practice does not represent the typical conduct of GPAs?

Unfortunately, this case has proved to be a land-mark case and, as such, it has led to the long awaited new requirements for maintaining recognition with the JCCA. What further changes result from the proposed Diploma are yet to be seen.

These issues remain however:

1. No matter how tight the CPD, mentoring and supervision becomes, the final determinant of where a GP can practice anaesthesia remains with the hospitals themselves. They are free to accredit anyone they wish, especially in small private centres.
2. Right or wrong, tragic out-comes that result from unsafe anaesthetic practice by non-FANZCA practitioners reflects on us all. We need reliable figures to show that we do, as a group, practice within accepted guidelines. And it is one thing for us to practice safely; it is another thing to be seen to practice safely!

- Dr Greg Coates, Victoria



For those looking to transition from existing qualification (eg JCCA, D.A. etc) it would be prudent to ensure that they meet all the current CPD requirements of either ANZCA, RACGP or ACRRM to allow an easier transition to the forthcoming Diploma.

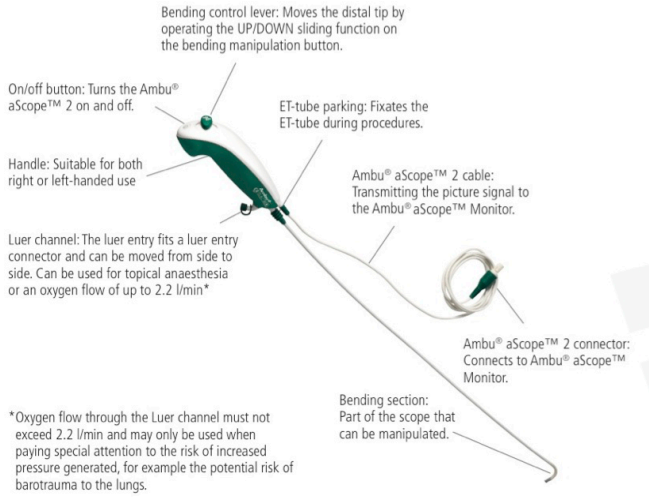
Equipment Review - the Ambu Ascope & LMA-as-conduit for intubation

Look, if you'd asked me five years ago "*should we have a bronchoscope in our rural theatre or ED?*" I would have thought you were crazy & perhaps slapped you. Back then use of a fiberoptic scope was a 'Ninja-skill'. Heck, even in a reasonably large anaesthetic department, senior FANZCAs would sometimes call in a colleague to do an 'awake fibreoptic intubation' - recognising that experience in this skill needs to be consolidated in a few individuals. But that was before I realised the powerful combination of the Ascope, to allow ETT passage through an LMA - a skill achievable for GPAs...

Imagine this. It's late in the day in Dingo Creek. The ambos bring in a 130kg farmer who's been involved in a quad bike accident. He's tachycardic, hypotensive and becoming increasingly obtunded (GCS M5V4E3 now dropping to M4V3E2). Pelvic binder is on, he's got IV access - USS shows a L PTX which you decide to decompress....but SpO2 remains around 90% and his GCS is still dropping. He's going to be intubated for transport and you make the decision to perform an RSI...pre-load with Hartmanns, wide-bore IV, Ketamine/Rocuronium, Kiwi-grip preloaded 8.0 COETT on bougie, Mac 3 blade with VL backup. Grade III larynx. Unable to pass bougie. Sats dropping...your VL has goop on the lens. You move through The Vortex by dropping in a second generation SGA, rescue ventilate & decompress the stomach. At least you're in the 'Green Zone" of the Vortex. Now what? Leave it? Or do something different?

Most of us have taken on board the 2015 recommendations of the UK Difficult Airway Society and switched to a second generation supraglottic device as the primary rescue device on our ED or Difficult Airway trolleys,.Even though the classic LMA is an excellent tool in elective anaesthesia, the second generation devices offer an advantage for the unfasted patient - ie the ability to decompress the stomach. Remember too that the FastTrach (our traditional 'difficult airway' intubating LMA) doesn't allow gastric decompression...and recent DAS guidelines suggest that blind intubation is a no-no...we should be visualising passage of the ETT though the supraglottic.

And THIS is where the Ascope comes in handy. It's a simple disposable flexible bronchoscope which attaches to a proprietary monitor screen with recording capability. Whilst it can be used as a primary device for the Ninja-skill of AFOI, the main use for occasionalists is as a rescue or 'staged airway' device. In an unanticipated difficult airway, simply drop in a supraglottic device, rescue ventilate....then use the LMA as a conduit for passage of the Ascope and an ETT. The technique is easily taught on task-training and the skill maintained by airway reconnaissance during elective lists. There is also option to use suction, insufflate oxygen & even topicalise. Cost is around $200 each, plus monitor.



The Ascope is designed to be used with the Ambu AuraGain intubating LMA. And this is where it gets complicated - I'd prefer to have ONE supraglottic device as a rescue tool in ED or on the Difficult Airway trolley. With over 20 different supraglottics on the market, it can be hard to choose the perfect device. For my money, I want something that's cheap, easy to insert, allows gastric decompression, doesn't rely on a cuff (which can tear or be inadequately inflated) and allows intubation. Sadly not all second generation SGAs are equal. The commonly used hyperangulated Supreme SGA is popular, but the rectangular cross-section precludes passage of an ETT. The FastTrach doesn't allow gastric decompression & is not the best conduit for fibreoptic. I've recently switched to the iGel as a rescue SGA device (mostly because our prehospital colleagues use it and so patients may present with it already *in situ*). No cuff. Gastric drainage. Same cost as a classic LMA. And a wonderful conduit for the Ascope. Really a winning combination! Have a look at video and read more on the KIDocs blog at :

http://kidocs.org/2017/07/gameshow-desert-island-supraglottic-airway-devices/ - Tim Leeuwenburg, SA

WHAT'S HAPPENING - DIARY DATES FOR 2018

There are already a couple of events on the GP-Anaesthesia calendar - but let us know of more !

If you are planning a conference, course or other event suitable for GP-anaesthetists or rural colleagues, please let us know for the next "Rural Anaesthesia Down Under" newsletter

IMPORTANT 2018 DATES :

Effective Management of Anaesthetic Crises (EMAC) - SYDNEY
April 19th – 21st, May 24-26, July 5-7, July 26-28. Sept 6-8, Oct 4-6, Nov 8-10, Dec 13-15
Sydney Clinical Skills & Simulation Centre, Royal North Shore Hospital, Sydney NSW
Addresses clinical & non-clinical skills relevant to effective anaesthetic crisis management.
http://www.sim.scssc.edu.au/training/courses/flyers/emac-course-flyer-scssc.pdf

Effective Management of Anaesthetic Crises (EMAC) - PERTH April 10-12, June 5-7
EMAC focuses on the role of the anaesthetist as the team leader during an anaesthetic crisis. It also focuses on the interaction with the team around the anaesthetist in order to utilise skills and resources effectively.
http://www.ecu.edu.au/schools/medical-and-health-sciences/our-facilities/ecu-health-simulation-centre/course-calendar/effective-management-of-anaesthetic-crisis-emac

RACGP & ACRRM GPA networking night - Melbourne & Australia-wide, April 17
6-7 pm AEST Meeting (dial in webinar available, then 7-8 pm light meal, face-to-face networking
https://westvicphn.com.au/images/PDFs/5414_GPA_anaesthetists_forum_and_networking_event.pdf

ANZCA Rural Special Interest Group Conference, Alice Springs June 15-16
The theme this year is "Rural anaesthesia – radiating from the centre" which acknowledges the variety of directions rural anaesthetists get pulled in, be it paediatric anaesthesia, the elderly, unusual co-morbidities, emergencies or just "routine cases"
http://www.anzca.edu.au/fellows/special-interest-groups/rural/rural-sig-meeting-2018

Rural Doctors Association of SA - Masterclass V Aug 24-2
Come join us for another two-day event designed to fulfil hospital credentialling requirements, including the usual mix of rural EM, anaesthesia & obstetric sessions
https://www.rdaa.com.au/rdasaevents/events/rdasa-masterclass-v

Critically Ill Airway course, The Alfred, Melbourne Aug 27-28
Airway management of the critically ill, particularly in settings outside of the operating theatre is uniquely challenging. This two day course will help participants develop a safe, flexible approach to airway management issues, including the difficult airway and tailored to the specific requirements of critically ill patients
www.cvent.com/events/critically-ill-airway-cia-august-2018/event-summary-36516f0edaab4cf0904d83dede61431f.aspx

DATES TO BE CONFIRMED

GP-Anaesthesia Conference Lyell McEwin Hospital, Adelaide SA
Held every two years, Dr Andrew Michael & team will be running this in late 2018

Western Australia GP-Anaesthesia Conference, Perth WA
Following on from the inaugural 2017 success, a further GPA event is planned for2018

Rural Emergency Responder Network / Prehospital Care - RMA18 Darwin, NT October 25-28
Over 50% of rural GPAs had responded to some form of prehospital incident in a 2012 survey, yet the role of the rural clinician in prehospital responses remains ill-defined, often with no formal training, equipment nor clinical governance. Whilst South Australia has the RERN system, other States do not. This workshop prior to ACRRMs Rural Medicine Australia conference will equip rural doctors with a baseline level and hopefully showcase the RERN model to develop rural resilience - see https://www.ncbi.nlm.nih.gov/pubmed/26105215

Do you know of a course or conference relevant for Rural Anaesthesia? Let us know via Facebook!