





2024.2 RGA SSSA Examination Report

January 2025

2024.2 Rural Generalist Anaesthesia (RGA) SSSA

Examination Report

The RGA-SSSA exam took place on November 30 and December 1, 2024. It was conducted online via Zoom. Candidates participated from their respective locations, while examiners were present on-site in Melbourne.

The exam consisted of eight vivas, each lasting 13 minutes. Two minutes were allocated for reading time, and an additional three minutes were used to transition candidates between Zoom rooms. The exam scenarios were designed to ensure alignment with the RGA curriculum, covering areas such as RGA Roles in Practice, Clinical Fundamentals, and Specialised Study Units.

Candidates were assessed on various clinical scenarios, focusing on their clinical management strategies, responses to evolving clinical situations, resource allocation, quality and safety measures, and applying their knowledge in rural or remote contexts.

A total of 49 candidates took the exam, with examiners and quality assurance examiners selected from a panel comprising fellows from all three colleges.

The overall pass rate for the 2024.2 SSSA viva examination was 75%.

The RGA-SSSA is designed to evaluate clinical judgment in anaesthetic practice, recognising that there are multiple safe and appropriate approaches to patient care in various clinical scenarios. The viva scenarios present different clinical situations to assess candidates' ability to make sound and safe decisions. Decisions deemed to be unsafe or expected to result in harm to a patient were likely to result in the viva being marked "below standard expected".

Candidates are encouraged to respond to questions by describing their typical actions in specific situations. Stronger responses are tailored to the individual patient context, providing patient-specific answers rather than relying solely on memorised responses.

Effective communication is essential during the viva. Candidates should articulate clear and well-organised responses to demonstrate their expertise and ability to address complex issues. Utilising an appropriate framework can help structure answers and ensure that essential safety aspects are covered. However, avoiding irrelevant frameworks that waste time and detract from the core issues is important.

Completing the entire viva is not mandatory for passing; however, maintaining a steady pace is vital to cover all topics adequately. High-performing candidates manage their pace effectively while providing concise answers grounded in solid clinical principles. They demonstrate their ability to organise thoughts and make informed decisions, reflecting consultant-level thinking.

In summary, successful viva performance requires a combination of effective communication, efficient time management, organised and concise responses, and sound decision-making based on clinical knowledge. By focusing on these key aspects, candidates can showcase their expertise and competence in handling various clinical scenarios.

Technical issues

Some technical issues arose during the exam when candidates connected to the examiner's room. Most problems were linked to the candidates' internet connections and audio quality. One instance involved the examiner's connection. Due to the delays caused by these issues, a small number of vivas were rescheduled to take place during breaks/bye stations.

It is recommended that candidates choose a location with reliable internet access, properly connected audio/headphones, and fully charged devices. Candidates should ensure that all computers and devices are plugged in or charged and should be familiar enough with their equipment to troubleshoot quickly (for instance, in case of accidental muting or Bluetooth disconnection). The most common problem appears to be Bluetooth disconnection, which is best avoided using a hard-wired audio device. Attending the exam from non-standard or non-compliant venues (for example, an operating theatre) not only causes audio issues for the examiners but also presents a distracting background.

Vivas

Each viva was conducted by a primary examiner who assessed the candidates via Zoom. A second examiner observed the candidates alongside the examiner and provided a second independent assessment.

At the end of each exam day, the court of examiners held a meeting to review the examination process and evaluate and validate the examination results. This court is responsible for monitoring the administration of the exam to ensure that the assessments are fair, valid, reliable, and in line with educational objectives and professional requirements.

The court has identified several common issues among candidates who did not perform well in these vivas:

1- There is a tendency for candidates to provide a rote-learned answer to an evolving clinical scenario without applying it to the context of the patient in question. For example, ergometrine is commonly used to manage uterine tone during a caesarean section, BUT NOT in a patient with pre-eclampsia and significant hypertension. The decision to use it both contravenes established guidelines and poses a risk to patient safety. Better candidates were able to recognise this and omit ergometrine from their answers.

- 2- The use of pre-planned scripts tended to waste time by providing irrelevant information, or information that was incorrect in the clinical context.
- 3- Use of vague statements like "I would position the patient" when the question requires details about HOW they will position the patient (e.g. left tilt for a caesarean section).
- 4- Some candidates had limited understanding of the resources available in Scenarioville, or the logistics of requesting further investigations. Common pitfalls included requests for sleep studies, cardiology or neurology consults, or the input of an Acute Pain Service.

Examiners also provided the following advice for future candidates:

- 1- Candidates are encouraged to ask examiners to repeat any questions or information if they are unclear about what was asked or stated.
- 2- Candidates are encouraged to highlight how a clinical scenario would cause them to alter their standard practice, rather than just describe their standard practice in unnecessary detail.
- 3- Candidates may find it beneficial to practice answering viva questions over an online video platform like Zoom. This allows them to engage with a mock examiner and practice interpreting non-verbal cues during the interaction.
- 4- Candidates are encouraged to ensure they meet all IT requirements and test their equipment before the exam. Audio issues due to Bluetooth disconnection can be avoided by using a set of hard-wired headphones. A guide to the IT requirements can be found on the RGA website.

The following stems and key topics were covered during all 24 vivas. This information is provided to help candidates in their exam preparation and to provide an example of the level of knowledge required to pass the viva examination successfully.

2024.2 RGA SSSA Vivas

Viva 1 – Airway Management

A 30-year-old man presented to the emergency department with a dental abscess in his right lower molar. He weighs 70 kg, is drooling, has swelling in the right lower side of his face, and has been unable to eat or drink overnight.

His observations are: RR 25, SaO2 94% on room air, HR 110, BP 140/90, Temp 38°C, GCS 15.

He has a patent 20G IV cannula in his right hand. The retrieval service estimates it will take over 4 hours to arrive, and they recommend securing the patient's airway in the meantime.

What preparations do you make before securing his airway?

Key Topics Assessed:

- Preparation for intubation, including an airway management plan.
- Predicting difficult airway management.
- Management of hypoxia and agitation.
- Difficult airway algorithm.
- Management of Can't Intubate, Can't Oxygenate (CICO) Scenario, including Front of Neck Access (FONA).

Feedback from examiners:

The majority of candidates could clearly outline the Vortex approach to the difficult airway and clearly describe steps in front of neck access. Better candidates were able to optimise the patient's airway prior to deterioration with the use of steroids, antibiotics, nebulised adrenaline, and positioning. Some were able to outline strategies for pre-oxygenating an uncooperative patient. Few recognised the potential impact of sepsis in this scenario.

Viva 2 - General Anaesthesia and Sedation

A 35-year-old woman is booked for a laparoscopy +/- excision of endometriosis in Scenarioville. She is otherwise fit and healthy. She takes Escitalopram 20mg daily. Her BMI is 32.

She is very concerned about prolonged and severe post-operative nausea and vomiting (PONV) after a previous day surgery laparoscopy resulted in an unplanned overnight admission. She has had a previous caesarean section under spinal anaesthesia with no issues. This patient is very anxious and wants to know if there are any strategies to reduce her risk of PONV this time.

How would you explore her history of post-operative nausea and vomiting and assess her risk for this procedure?

Key Topics Assessed:

- Risk assessment for PONV.
- Anaesthetic plan to minimise PONV risk.
- Management of bradycardia during surgical insufflation.
- Physiological effects of a pneumoperitoneum.
- Management of extubation.
- Discharge planning.

Feedback from examiners:

Most candidates were able to develop a safe plan for PONV prevention, manage intraoperative bradycardia well, and outline a safe extubation strategy. However, there was a poor understanding of the physiological effects and potential complications of a pneumoperitoneum. Some candidates were willing to discharge the patient home without a responsible adult.

Viva 3 – Obstetric Anaesthesia

A 32-year-old patient presents with headaches. She is 37 weeks pregnant. She has had a previous Lower Segment Caesarean Section for breech under uneventful spinal anaesthesia.

She has been assessed by the Rural Generalist Obstetrician, who is concerned about preeclampsia. Her blood pressure is 170/105. The cardiotocography (CTG) is non-reassuring.

The obstetrician would like to perform a Category 2 Emergency Caesarean Section.

Please outline your pre-anaesthetic assessment for this patient.

- Pre-operative assessment of a patient with pre-eclampsia.
- Management of hypertension.
- Seizure prophylaxis, use of magnesium.
- Anaesthetic management for caesarean section.
- Contraindications to spinal anaesthesia, specifically with respect to thrombocytopaenia.
- Management of intra-operative blood loss, use of oxytocics, surgical management of bleeding.

Some candidates gave step-by-step details of a spinal anaesthetic, rather than giving a more holistic "anaesthetic plan" that included blood pressure management, seizure prophylaxis, and invasive blood pressure monitoring. Better candidates were able to discuss anti-hypertensives and magnesium and provide appropriate dosing. Examiners were concerned by the number of candidates who included ergometrine in their tocolytic plan, despite a significant part of the viva being spent discussing hypertension, and despite prompting to reconsider. Assessment and management plans should be implemented with consideration given to the clinical context.

Viva 4 – Paediatric Anaesthesia

It is 1 pm on the weekend at Scenarioville Hospital.

A 5-year-old girl presents to the Emergency Department accompanied by her mother with a supracondylar fracture after falling off a trampoline. The surgeon would like to take her to the theatre immediately, as her hand is cold and pulseless.

She had lunch 1 hour ago and is very distressed.

Intravenous access has not been obtained.

She has a past history of asthma.

What are your main concerns?

Key Topics Assessed:

- Highlighting key concerns and priorities in management.
- Pre-operative assessment.
- Modes of induction of anaesthesia.
- Consent discussion with parents.
- Induction plan, including drugs and equipment.
- Initial management of aspiration on induction.
- Further management, including consideration of transfer to a tertiary centre.

Feedback from examiners:

This question was generally well answered. Better candidates were able to use their reading time to consider equipment sizing and drug doses. Common pitfalls included generous dosing of sedative premedication in an unfasted patient, focussing on peripheral aspects of consent without addressing aspiration risk, poor understanding of ventilation strategies for a 5 year old, and using adult drug dosing in mg/kg for a child. Better candidates considered using IM sedation to facilitate IV cannulation and RSI. Candidates are encouraged to discuss with their supervisors to develop strategies for managing this common scenario in RGA practice.

Viva 5 - Pain Medicine

You have a 68-year-old male for a total knee replacement (TKR) on your list in Scenarioville.

He has a history of chronic pain secondary to widespread osteoarthritis (OA), well-controlled hypertension and hypercholesterolaemia.

His medications are:

- perindopril 10mg
- rosuvastatin 40mg
- buprenorphine transdermal patch (20mcg per hour, 7-day)
- paracetamol slow release (SR) 665mg x 2 tds.

He has had a colonoscopy and a laparoscopic cholecystectomy in the past with no anaesthetic issues.

On examination:

Observations all within normal range

Body Mass Index (BMI) is 30 (92kg, 175cm)

Mallampati 2 with a good range of movement of the neck and thyromental distance of >7cm

Cardio-respiratory exam is unremarkable, and ECG shows normal sinus rhythm He has significantly reduced movement of his lower back due to long-standing OA in the lumbar spine

Please outline your anaesthetic plan for this gentleman's total knee replacement.

Key Topics Assessed:

- Risks and benefits of different anaesthetic options (GA vs spinal).
- Impact of chronic pain on anaesthetic options and plan.
- Troubleshooting difficult spinal anaesthetic insertion.
- Intra-operative and post-operative analgesia plans.
- Assessment and management of post-operative pain.
- Follow-up of a failed spinal anaesthetic.

Feedback from examiners:

This question was generally well answered, with most candidates recognising the patient's opioid tolerance and making appropriate analgesic plans for this. Opioid dosing tended to be cautious but appropriate in this setting. Better answers included consideration of magnesium, IV lignocaine, clonidine, ketamine and neuropathic agents. Troubleshooting a difficult spinal was generally well handled, as was postoperative pain in the recovery room.

Viva 6- Perioperative Medicine

You are assessing a 70-year-old female patient who presents to the preadmission clinic for an elective right total hip replacement due to osteoarthritis. She has Type 2 Diabetes and Ischemic Heart Disease (IHD), having had a drug-eluting stent placed four months ago. She has no allergies, and her BMI is 31.1.

Medications: Dapagliflozin, Metformin, Clopidogrel, Aspirin, Atorvastatin, Atenolol

How do you assess the severity and stability of her diabetes and ischaemic heart disease?

Key Topics Assessed:

- Pre-operative assessment, including diabetes, IHD and functional capacity.
- Pre-operative optimisation and planning, including optimal timing of surgery.
- Pre-operative medication management.
- Assessment of tachycardia post induction.
- Management of intra-operative SVT with haemodynamic compromise.
- Ongoing management, including transfer to tertiary centre.
- Preparation for transfer.

Feedback from examiners:

The pre-operative assessment was generally well handled, with appropriate collaboration with cardiology and endocrinology colleagues. Few candidates suggested that surgery should be delayed or done in a tertiary setting. There seemed to be some confusion between SGLT2i medications and GLP1 agonists and the perioperative risks of each. While SVT was generally well managed, some candidates did not appreciate that it was reasonable to abandon elective surgery at this point, and extubate the patient once stable. While cardiology follow up was warranted, the patient did not necessarily need to be transferred intubated for that to occur.

Viva 7- Regional Anaesthesia

A 50-year-old female comes to see you for a pre-anaesthetic assessment. She is booked for an open right inguinal hernia repair in a week's time. The hernia is clinically significant needing urgent surgical correction.

She is on no regular medications but has a 20-pack-year smoking history. Her airway exam was unremarkable, apart from decreased air entry on all lung fields.

She is very keen to have her surgery at Scenarioville but has had an episode of awareness under GA with a previous procedure.

She was encouraged by the referring surgeon to discuss with you the prospect of having her surgery done under a spinal block.

How would you assess her suitability for a spinal anaesthetic?

Key Topics Assessed:

- Assessment of suitability for spinal anaesthesia, including potential contraindications.
- Potential complications and discussion with patient.
- Trouble-shooting an inadequate spinal block.
- VTE prophylaxis, including the impact of spinal anaesthesia.
- Assessment and management of post-operative severe headache.
- Risks and benefits of epidural blood patch for post-dural puncture headache.

Feedback from examiners:

This question was considered to cover core material for an RGA, and most candidates performed well. While most candidates covered the essential material, those who did so with a clear structure and context scored better.

Viva 8- Resuscitation, Trauma and Crisis Management

An 18-year-old patient with a BMI of 23 has sepsis from a perforated appendix and requires an urgent laparoscopic appendectomy.

The patient's current observations are: HR 120 bpm, BP 80/50 mmHg, Capillary refill 4 seconds, Respiratory Rate 18 bpm, Oxygen Saturation 96% on 2L via nasal cannulae, Glasgow Coma Score (GCS) 15.

Please describe your initial anaesthetic assessment and plan.

Key Topics Assessed:

- Pre-operative assessment and resuscitation prior to surgery.
- Anaesthetic plan for patient with sepsis and haemodynamic compromise.
- Crisis management of power failure during surgery.
- Assessment and management of intra-operative hypertension and tachycardia.
- Assessment and management of post-operative recall of intraoperative events.

Feedback from examiners:

This question was generally well answered. When faced with an uncommon event, candidates who were able to outline their key concerns, prioritise patient safety and take a lead role while delegating tasks appropriately were able to score well.

Viva 9- Airway Management

You are scheduled for an elective endoscopy list in Scenarioville.

The next patient is a 60-year-old man booked for a gastroscopy and colonoscopy. He has a BMI of 39 and weighs 110 kg. Although medically complex, he has been cleared for sedation.

There is a known difficult airway alert from a previous intubation, but he has had surgery at a major teaching hospital since then without any reported issues.

Past Medical History: 1. Obesity (weight 170kg previously, 110kg now), 2. Hypertension, 3. Hypercholesterolaemia, 4. Obstructive Sleep Apnoea (OSA)

Medications: Olmesartan / Hydrochlorothiazide, Rosuvastatin, Aspirin, Semaglutide - ceased 4 weeks ago.

What are the features of this case that may make airway management difficult?

Key Topics Assessed:

- Predictors of difficult airway management.
- Airway assessment.
- Management of intra-operative laryngospasm.
- Approach to intubation when anticipating difficulty.
- Planning for extubation.
- Management of post-operative hypertension.

Feedback from examiners:

This question was generally well answered. Candidates who scored better could give specific details, e.g., what specific information they are looking for in previous notes, what features they are looking for in an airway assessment or detailing individual steps in an extubation plan.

Viva 10- General Anaesthesia and Sedation

You are called to the ED to provide procedural sedation for a 75-year-old male who presented following a fall at home. He has a dislocated left shoulder requiring relocation.

His weight is 90kg (BMI=30). His past history includes Ischaemic Heart Disease, Hypertension, and Hyperlipidaemia.

His medications are: Aspirin 100mg, Irbesartan 150mg, Rosuvastatin 40mg daily. His vital signs are: Alert and talking but disoriented, Heart Rate = 150, Respiratory Rate = 25, Blood pressure = 80/50, Oxygen saturation = 100% on Hudson mask at 6 L/min. ECG – ventricular tachycardia, rate 150 bpm.

He has already received 150mg of Amiodarone.

What are the key elements of your assessment of this patient?

Key Topics Assessed:

- Recognition of significant haemodynamic compromise and potential for rapid deterioration.
- · Assessment and resuscitation.
- Preparation for cardioversion in ED.
- Further sedation / GA for shoulder relocation.
- Potential complications of arterial cannulation.
- Assessment and management of post-operative confusion and agitation.

Feedback from examiners:

This question was generally well answered, with better candidates able to clearly identify the life-threatening nature of this presentation, allocate resources appropriately and manage post-operative agitation safely. Common mistakes included excessive drug dosing in an elderly, unstable patient and wasting time on a generic discussion without focussing on the specifics of this case. This was a challenging question due to the spread of topics covered, but those who were able to focus on first principles and stick to the clinically relevant information were able to complete the viva in the allocated time.

Viva 11- Obstetric Anaesthesia

A 25-year-old female presents to Scenarioville with ultrasound-confirmed perforated appendicitis. She has a temperature of 38.5°C, a heart rate of 110 bpm, blood pressure of 95/55 mmHg, and pain rated at 7/10.

She has a viable 28-week intrauterine pregnancy, has had an uneventful antenatal course and has no past medical history. Her BMI is 30.

Specialists at a tertiary hospital recommend an emergency laparoscopic appendectomy at Scenarioville, with additional staff and retrieval services on standby for potential neonatal emergencies.

Outline your pre-operative assessment and optimisation.

- Pre-operative assessment, including anaesthetic, obstetric and surgical assessment.
- Recognition of the impact of surgery on the foetus.
- Consent discussion.
- Safety of medication use during pregnancy, including TGA classification.

- Anaesthetic plan.
- Management of aspiration on induction, including intra- and post-operative care.

Many candidates wanted to reposition a BMI 30 obstetric patient in the left lateral position when suction and intubation should have been the priority. Many candidates gave rote-learned answers that didn't consider the specific context of this patient.

Viva 12- Paediatric Anaesthesia

You are called to the emergency department (ED) to assist with a 5-year-old child (20 kg) who has presented with difficulty breathing and a fever of 38.8 degrees Celsius. When you arrive, the child is sitting up, leaning forward, and is tachypnoeic.

Outline your initial assessment and management.

Key Topics Assessed:

- Initial assessment and management of respiratory distress in a child.
- Differential diagnoses of respiratory distress, and key features of assessment available to differentiate between these causes.
- Preparation for intubation in a child with a likely diagnosis of croup.
- Preferred induction technique (IV vs Inhalational), with a detailed description of this technique.
- Principles of fluid management in a child.
- Handover to retrieval staff.

Feedback from examiners:

This question was generally well answered. Better candidates applied a DRSABCDE approach, sought help from a second RGA and experienced nurse assistant, and had a well-structured approach to preparation and intubation. While most candidates described a safe induction technique, they struggled to justify why they chose that technique or identify the challenges they would likely encounter. Some candidates did not consider reducing doses of induction drugs or have vasopressors or emergency drugs. While the 4-2-1 rule of fluid maintenance was well known, few candidates addressed replacing an existing deficit.

Viva 13- Pain Medicine

You are a Rural Generalist Anaesthetist in Scenarioville for a gynaecology list. A 28-yearold woman with chronic pelvic pain and anxiety is scheduled for a diagnostic laparoscopy. She has had no previous general anaesthetics and has a BMI of 31. She currently takes Oxycodone SR 20 mg twice daily and Paroxetine 40 mg daily. The surgeon indicated that the procedure is just a "look around" and that she will have no post-operative pain.

Please outline your pre-anaesthetic assessment.

Key Topics Assessed:

- Pre-operative assessment and plan, with focus on pain and PONV.
- Hazards of steep head-down positioning.
- Management of high airway pressures and desaturation.
- Management of severe post-operative pain.
- Management of PONV.

Feedback from examiners:

This was deemed to be a relatively straight-forward question, which was generally well answered. Better candidates were able to apply their answers to the clinical context rather than giving a pre-rehearsed spiel.

Viva 14- Perioperative Medicine

A 69-year-old female presents to your Scenarioville Pre Anaesthetic Clinic for a wide local excision of a right breast lump.

She has a past history of

- Atrial fibrillation (AF)
- Permanent pacemaker (PPM)
- Hypercholesterolaemia
- Glaucoma
- Severe post-operative nausea and vomiting (PONV) after a previous laparoscopic cholecystectomy

Her medications are: Apixaban, Atenolol, Atorvastatin, and Timolol eye drops.

What information do you want to know about her PPM?

- Pre-operative assessment of PPM.
- Pre-operative assessment of cardiac function.
- Anaesthetic plan specific to the presence of a PPM, including diathermy use intra-operatively.
- Anaesthetic plan for patient with a history of severe PONV.

- Assessment and management of intra-operative hypertension, high BIS reading and a tissued IV cannula.
- Assessment and management of recall of intra-operative events.

While most candidates could assess the pacemaker and cardiac function well, very few could formulate a perioperative plan. Many were confused about the use of diathermy, and few considered additional monitoring or strategies in the event of pacemaker dysfunction. While this was an elective case, and further advice could be sought, candidates may need to manage a PPM in an emergency, so a basic understanding should be expected. The questions about PONV and awareness were generally well-managed. A surprising number of candidates stated that they would declare an emergency and call for help, when all that was required was deepening the patient with sevoflurane while gaining IV access and recommencing the propofol infusion, which is well within the capabilities of an RGA working independently.

Viva 15- Regional Anaesthesia

A 60-year-old male is booked for an elective right total knee replacement in two weeks due to severe osteoarthritis. He has a history of type 2 diabetes, hypertension, and dyslipidemia, managed with metformin, ramipril, and atorvastatin. He prefers spinal anaesthesia, as his friend had the same procedure with that option, and he wants to know if it's suitable for him.

Please describe your pre-anaesthetic assessment for this patient.

Key Topics Assessed:

- Pre-operative assessment, including assessment of co-morbidities.
- Assessment for suitability for spinal anaesthesia, exclusion of contraindications.
- Potential benefits of spinal anaesthesia vs general anaesthesia.
- Anatomy, contraindications and potential complications of spinal anaesthesia.
- Assessment and management of post-operative neurological injury.

Feedback from examiners:

Most candidates were able to provide a detailed assessment, and the better candidates could synthesise that information into briefer answers that still included relevant details. Some candidates were unable to cite many benefits of spinal anaesthesia over GA. The anatomy, contraindications, and complications were answered well. Some candidates confused a neurological injury with neuropathic pain. Better answers included referral to allied health and ongoing follow-up of neurological injury.

Viva 16- Resuscitation, Trauma and Crisis Management

You have been called to the emergency department to assist with a 45-year-old female who has been stabbed near her clavicle with broken glass. She drank several alcoholic beverages before the incident and has a Glasgow Coma Scale (GCS) score of 14. She has significant subcutaneous emphysema, dyspnoea, and is coughing up blood. The ambulance is expected to arrive at Scenarioville Hospital in 12 minutes. Your expertise in airway management and resuscitation is needed.

How will you brief your assistant to prepare for the patient's arrival and your anticipated plan?

Key Topics Assessed:

- Preparation for trauma patients, including resource allocation, role delegation and use of accepted guidelines.
- Plan for airway management when difficulty is anticipated.
- Recognition and management of pneumothorax post-intubation.
- Subsequent management and preparation of the patient for retrieval.
- Recognition and management of deterioration, reassessment, and treatment of ongoing bleeding.

Feedback from examiners:

Better candidates assumed the role of team leader and managed the case according to recognised trauma guidelines, including primary and secondary surveys and frequent reassessment in the event of a clinical deterioration. While delegation of roles to others was appropriate in this scenario, they should still be able to provide general principles of intercostal catheter insertion. Candidates were expected to recognise the severity of a Hb of 68 and consider the availability of blood products in Scenarioville. Candidates are advised to consider how they would manage this case in Scenarioville, not in a tertiary centre.

Viva 17- Airway Management

A 65-year-old man is brought by ambulance to your rural emergency department after injuring the right side of his face with heavy spring-loaded equipment. He reports no loss of consciousness or vomiting.

On examination, there is extensive swelling from the lateral canthus of the right eye to the right submandibular region, causing facial distortion, as well as swelling in the right neck leading to drooling.

The on-call locum surgeon is ready to drain the right facial hematoma in the local operating theatre.

Past Medical History: Obstructive sleep apnoea poorly compliant with CPAP, Coronary artery disease with cardiac stents x 2 (2020), Obesity class 3 (BMI 45), approximately 125kg

Medications: Clopidogrel 75mg daily, Metoprolol 25mg daily, Atorvastatin 80mg daily, Perindopril 4mg nocte.

Allergies: None

What factors would determine this patient's suitability for surgical intervention in Scenarioville?

Key Topics Assessed:

- Case selection in rural practice, including anticipated anaesthetic difficulty, resource availability and ongoing management.
- Airway assessment and predictors of difficult airway management.
- Preparation for difficult airway management.
- Management of CICO scenario.
- Preferred technique for front of neck access (FONA).

Feedback from examiners:

Good candidates were able to identify that while this man is unsuitable for elective surgery in Scenarioville, they may be forced to intervene in an emergency. Optimisation, preparation and planning were critical to successful management. Some candidates failed to recognise the importance of clopidogrel and the subsequent bleeding risk. CICO and FONA were well described.

Viva 18- General Anaesthesia and Sedation

An 80-year-old man is on your list for an elective Transurethral Resection of the Prostate (TURP). You see him in your clinic 2 weeks before his planned surgery.

His medical history includes hypertension, transient ischemic attack (TIA), type 2 diabetes mellitus, and stage 3 chronic kidney disease.

His current medications are rivaroxaban, candesartan, atorvastatin, and metformin.

He has no known allergies and is living independently with some assistance from his daughter.

Please outline your pre-operative assessment.

Key Topics Assessed:

- Pre-operative assessment, including assessment of co-morbidities.
- Case selection for rural practice.
- Peri-operative medication management.
- Anaesthetic plan for GA in elderly, co-morbid patient when spinal anaesthetic is unsuccessful.
- Assessment and management of post-operative confusion and agitation.

Feedback from examiners:

Better candidates were able to focus on the salient features of this patient's comorbidities and consider them in their decision making, rather than relying on a generic pre-operative assessment. Bridging clexane was not indicated based on his thromboembolic risk assessment. Candidates are reminded to consider age and renal function in drug dosing and adjust accordingly. Candidates who have limited experience with TURP were not disadvantaged as long as they provided a safe, contextualised plan.

Viva 19- Obstetric Anaesthesia

You are called to review a patient with threatened premature labour.

She is 28 years old, G2 P1 at 34+5 weeks gestation. She has had a previous vaginal delivery complicated by a postpartum haemorrhage. She has a Body Mass Index (BMI) of 27 (70kg), has no other past medical history, and this pregnancy has been uneventful to date.

The midwife reports that she is contracting, and the cardiotocograph (CTG) shows a foetal bradycardia. You immediately attend to the patient with the obstetrician, who diagnoses a cord prolapse.

What is your immediate management of this obstetric patient with a cord prolapse?

- Immediate management of a cord prolapse, including foetal support.
- Targeted assessment of time-critical emergency patients.
- Anaesthetic management of GA caesarean section.
- Assessment and management of high airway pressures intra-operatively.
- Extubation plan.
- Management of severe post-operative pain.
- Assessment and management of post-operative sedation.

Candidates who provided protracted answers struggled to finish the viva. Better candidates could synthesise the clinically relevant information, including the obstetric and neonatal considerations in their answers, and contextualise their answers to the patient and to Scenarioville. Candidates who gave a generic description of an RSI or acute pain management without considering the obstetric context often missed key points. Few candidates considered regional techniques in their analgesia plan.

Viva 20- Paediatric Anaesthesia

You are called by the duty ED Medical Officer for assistance. The ED Medical Officer and Junior Doctor have attempted to remove a nasal foreign body under IV ketamine sedation from a 5-year-old girl who weighs 20kg.

The ED MO has been unsuccessful in removing it.

The child remains sedated, with stridor and SaO2 88% on Hudson mask on 10L/minute.

What are your immediate considerations and approach towards assisting?

Key topics Assessed:

- Assessment of acute airway compromise.
- Airway management in ED or other sites away from the theatre.
- Formulation and justification of induction plan, including anticipated hazards.
- Description of preferred induction technique.
- Ongoing management after intubation with known oesophageal foreign body.
- Preparation for transfer to tertiary centre.
- Guideline development for procedural sedation.

Feedback from examiners:

This was a challenging question, but some candidates were able to articulate the potential for an airway foreign body to be present and modify their induction plan accordingly. Many candidates outlined a routine paediatric induction plan without considering the danger that a foreign body might pose.

Viva 21- Pain Medicine

You are Scenarioville Hospital's on-call rural generalist. At 5 p.m., your emergency colleague calls you for assistance with analgesic management.

An 86-year-old man has fallen at home, and the chest X-ray shows four left-sided rib fractures. His respiratory rate is 22/min, but all other observations are within normal limits. There is no evidence of any other injuries.

Paramedics have given him a methoxyflurane inhaler (Penthrox) during transport to the hospital.

Describe your considerations with regard to his analgesic management.

Key Topics Assessed:

- Consider factors that influence acute pain management, including age, comorbidities, other injuries, functional assessment, severity of pain and available treatment modalities.
- Formulation of an analgesic plan and assessment of its effectiveness.
- Assessment and management of clinical deterioration, with worsening hypoxia.
- Immediate management of possible tension pneumothorax.
- Outline of communication that is required before transferring the patient to a tertiary centre.
- Challenges posed by aeromedical retrieval.

Feedback from examiners:

Many candidates struggled to outline an organised approach to managing traumatic pain in the elderly and did not consider age, frailty, or the underlying mechanism of injury in their analgesia plan. The management of deterioration and needle decompression was handled well. The questions about communication and hazards of aeromedical transfer were poorly answered despite this being an essential part of rural medicine.

Viva 22- Perioperative Medicine

A 65-year-old female patient attends your Preoperative Assessment Clinic and is booked for Ureteroscopy and extraction of ureteric calculus in three weeks' time. They had a ureteric stent placed as an emergency procedure recently, for which they had an uneventful anaesthetic.

The patient is a smoker of 15 cigarettes per day for 40 years, Hypertensive, Hypercholesterolaemia and Diabetic. They are 95kg and 170cm tall (BMI 32.9)

Medications: Rosuvastatin, Ramipril, Empagliflozin, Metformin, Glargine Insulin 40 units nocte, Semaglutide injection weekly.

What is your approach to optimisation for the procedure in three weeks?

- Pre-operative optimisation of co-morbidities.
- Pre-operative medication management, particularly diabetes medications.

- Benefits of smoking cessation prior to surgery.
- Screening tools for OSA.
- Influence of likely OSA on anaesthetic management.
- Management of airway obstruction in the recovery room.

This question was generally answered well, with a good understanding of current guidelines. However, there was some confusion between SGLT2i and GLP-1 medications, which are commonly prescribed together. Understanding the implications of failing to cease medication pre-operatively will help candidates make appropriate decisions about proceeding with elective surgery.

Viva 23- Regional Anaesthesia

A 27-year-old woman has had a term vaginal delivery of her second child, a boy weighing 3.2 kg. Her only analgesia for labour was nitrous oxide. Two hours after the birth, her placenta remains undelivered. The obstetrician requests that she come to the operating theatre for manual removal of her placenta within the next hour. She has had a recent upper respiratory tract infection, which has exacerbated her asthma.

Describe your anaesthetic assessment.

Key Topics Assessed:

- Pre-operative assessment.
- Outline preferred anaesthetic technique (GA vs spinal anaesthetic), with justification of choice.
- Factors that influence drug choice and dose for spinal anaesthetic.
- Discharge criteria following spinal anaesthetic.
- Assessment and management of possible neurological injury post spinal anaesthetic.

Feedback from examiners:

For a relatively straightforward question, this was surprisingly poorly answered. Many candidates overlooked the patient's asthma or URTI or how this might impact anaesthesia. Many assumed blood loss and haemodynamic instability when it was not present. Few had a structured approach to spinal dosing. Discharge criteria were poorly understood, and reporting of an adverse event was not well answered.

Viva 24- Resuscitation, Trauma and Crisis Management

You are anaesthetising a 32-year-old male for a laparoscopic appendicectomy. He has been unwell with abdominal pain and vomiting for 3 days. He has no past medical history, and this is his first anaesthetic. The patient was induced with a modified rapid sequence induction using propofol, fentanyl and rocuronium uneventfully. Anaesthesia is being maintained with sevoflurane using volume-controlled ventilation.

The surgeon has insufflated the abdomen. The patient is increasingly tachycardic with a heart rate of 120 bpm, blood pressure of 90/40 mmHg, oxygen saturation of 99% on 40% oxygen (FiO2 0.4), and his end-tidal CO2 is 50mmHg.

What are your differential diagnoses for this situation?

Key Topics Assessed:

- Initial assessment of differential diagnoses.
- Initial management steps and further steps are required to identify the cause of this presentation.
- Principles of management of Malignant Hyperthermia.
- Anatomy relevant to insertion of a central venous catheter in an internal jugular vein.
- Risks of CVC insertion and strategies to minimise these risks.

Feedback from examiners:

Several candidates could only provide a limited number of differentials to a relatively common problem, missing simple steps in the initial stages. Some were very quick to diagnose MH and give dantrolene on the basis of one set of observations, which showed poor judgement and missed more common causes. Once confirmed, the management of MH was well answered, with better answers considering the context of managing such a case in Scenarioville. The anatomy of CVC insertion was poorly understood, with many unable to describe strategies to ensure venous placement.