

Learning outcomes

By the end of IAC Module 1 the learner should be able to:

- Discuss the AAGBI guidelines on preoperative assessment
- Assess a patients airway
- Undertake the preoperative assessment of a patient undergoing an elective procedure
- Access patient resources on anaesthetic risk
- Know the NICE guidelines on preoperative investigations
- Safely manage key classes of drugs during the perioperative period

Trainer information

During the module learners will be developing skills and knowledge mapped to the RCoA IAC curriculum (see figure bellow).

Skills Preoperative assessment Rapid sequence induction of high risk patients (ASA ≥III) Management of emergence Anaesthetic machine check from general anaesthesia - Induction of general including tracheal extubation anaesthesia Preoperative assessment Failed intubation drills (ASAI/II) Tracheal intubation via direct WHO checklist 'sign in' Initiating management of Anaesthesia with emergencies and calling for Peripheral venous cannulation spontaneous and controlled Basic airway management (mask ventilation/airway ventilation adjuncts/SAD insertion) Assessment and reversal of pain including patient Transfer from anaesthetic neuromuscular blockade room to theatre Handover to recovery team Positioning patients for Prescription for the postoperative period with volatile gases IAC module 1 - Anaesthetic preoperative assessment Impact of major comorbidity Predictors of difficult airway on the conduct of anaesthesia management Understanding the scope of novice anaesthetists and when to call for help Knowledge

IAC Module 1 uses a fictional tutorial to introduce the AAGBI guidelines on preoperative assessment and a provide a single page summary. This is followed by a set of 10 MCQ on airway assessment.

The learner then undertakes a virtual day shift where they are responsible for the preoperative assessment of three patients undergoing elective upper GI surgery. A blank anaesthetic chart is provided to complete during the interaction with the virtual patients. The module allows interactive progression of the narrative.

Key points on our virtual patients

Robert Richards has a significant cardiovascular history and the learner is offered relevant investigations including his ECG and a recent ECHO as part of the preassessment process.

Susan Fletcher is a type-2 diabetic with a BMI of 42. During her airway assessment several adverse features become apparent. Development of her narrative includes perioperative management of her diabetes. Please note: a later module will expand on management of the difficult airway and management of people with a high BMI.

Lisa Redbridge has no significant past medical history. Progression of her case is used to discuss anaesthetic risk and introduce the anaesthetic risk patient information available from the RCoA.

After accessing these patients preassessment clinic proformas and hearing their anaesthetic history via audio recordings a 'model' anaesthetic preassessment is provided for each patient and the learner is prompted to reflect on the pertinent aspects for each patient.

The learner is then offered a number of decisions to progress the narrative. A summary of perioperative drug management and links to the NICE guidance on perioperative investigations are incorporated into this progress.

Finally the MCQ from the start of the case are repeated with answers provided.

Trainer information - discussion

Discussion of the case should develop naturally according to the individual's learning needs in a similar fashion to a CbD in a clinical setting. The learner should be encouraged to develop their own professional judgment according to required curriculum competence areas. The learner should be aware of these as they are stated at the start and on completion of each Module.

Other points for discussion could include:

- What are the predictors of difficult airway management?
- What factors make a patient high-risk?
- How to raise concerns appropriately after assessing a patient?
- What is the expected scope of practice of a novice anaesthetist?

Appendix 1: IAC Module 1 transcripts

Robert Richards

Yep that's me, Robert Richards, 84 Boyle road and I'm just gone 61. I prefer Rob to Robert though.

Can I tell you about why I'm here today? It's to get my gall bladder taken out. I've got gall stones you see, they've been no end of trouble the last couple of years. I'm feeling a bit nervous, otherwise I'm fine, been well the last couple of weeks, no coughs or colds.

I've got high blood pressure, I take pills for that, the nurse is happy that they do the trick, and the GP tells me I have high cholesterol. They say that's partly why I had a small heart attack a couple of years ago, 2018 it was. They took me straight in to have a stent in. Then not long after that they said I had problems with my heart rhythm, atrial fibrillation I think its called and I had to be on blood thinners.

Other than that I'm fit as a fiddle, I gave up smoking after the heart attack. I'd been a smoker for 40 years! A pack a day, and I just stopped overnight. I'm not a drinker, it's high-days and holidays for me. I teach physics at the comp but only part time now after the heart attack. I walk the dog every morning and evening. I sleep like a log with one pillow and lie flat no problem. I might get a bit of indigestion after a curry but never get it otherwise.

I've got no problems with my neck, my teeth aren't too bad, just a top partial denture. I haven't had anything to eat since ten o'clock last night and I had black tea at six this morning just like the letter says

I've got my repeat prescription here with all my medicines, they are all I take apart form the odd nurofen for a headache or such. I'm not allergic to anything. I followed the instructions the nurse about my medicines, she said to stop the aspirin a week, warfarin five days, and I didn't take the ramipril this morning but I've had the rest.

I'll admit it though I am a bit nervous about being under. The only time I've had any sort of anaesthetic was when I was a nipper. Eleven. Appendix. It was pretty uneventful but these things stay with you. Not that any of the family has ever had any problems and you all know what you're doing so I know I'm in safe hands.

Susan Fletcher

Susan Fletcher, Sue really, and its 32 Charlies close, and I'm 47 next month.

I've been seeing Mr Timmins about the gall stones in clinic for two years now, he wanted me to try and loose some weight before thinking about surgery out but four months ago I was in terrible pain and it turned out that I had an infection in my gall bladder. I was in a week and felt pretty rough, so after that it was enough is enough and he said he'd take it out.

I have a bit of asthma, I just use my blue inhaler when I need it, which isn't often, never needed to go to hospital for my chest and the only antibiotics I've had this year were when I was in with my gall bladder. Never taken steroids for it either. I've not have any coughs or colds in a long time.

I've been diabetic since I was pregnant with my second, erm, that was 16 years ago now. I was on just the tablets but my sugars were still in the high teens so I started insulin about 18 months ago. I use the novamix 30 pen and it's 28 units in the morning and then 30 at dinner time, I take metformin, that's 1 g twice a day and since I've been on that lot my HbA1c has come down to 58 the last time they did it. They also put me on a statin too because of my diabetes.

I've got low thyroid and take thyroxine for that, the GP has just changed that to 100 a day.

Other than that I'm quiet healthy really, I work as a shop assistant and I'm on my feet all day. I sleep a bit propped up with a few pillows because I get wicked heartburn if I don't. I take 20 of omeprazole to keep on top of it but I still can't eat spicy food. I'm not a smoker and I don't drink because of the heartburn.

I take ibuprofen when I need it, it doesn't affect my chest at all. I don't take anything else, I'm not one for taking things if I don't need it.

I have a full set of veneers and you look after them they cost a fortune. I've had nothing to eat or drink since dinner last night, so, erm, that was half nine.

The only anaesthetic I've had before was an emergency c-section with my second. Everything was such a rush and they said they needed to get her out NOW. Then the next thing I know is I'm back on the postnatal ward with a really sore throat and a baby. I was pretty sick, I remember that. She was absolutely

fine, giving me hell now, teenagers, huh!? My mum and sister have had lots of anaesthetics between them. They always seem fine.

Lisa Redbridge

Yep, that's me, Lisa Redbridge, 67 Lussac Lane, 38 years old.

I've had problems with colicky pain for the last few years and the GP sent me for an ultrasound which showed I had gall stones, they said I could just put up with it or have my gall bladder removed by keyhole so here I am.

Apart from that I've always been fit and well. I don't get reflux and never see the doctor for anything else. Not ever had any kind of operation but I know there haven't been any problems with anaesthetics in the family. I don't take any medications. I'm ok with NSAIDs if I need them but that's not often. I'm not allergic to anything that I know of. I don't smoke or drink.

I work as a chemist in pharmaceutical development and run to and from work every day. My teeth are all good and I followed the instructions in the letter about fasting so I last had anything yesterday evening around half ten. I got up too late this morning to have a drink so that was it.

Actually I'm really more worried about the anaesthetic than the operation it's self. I was on a news website and they were talking about when people have been awake all the way through and no one realises. That's my worst nightmare.