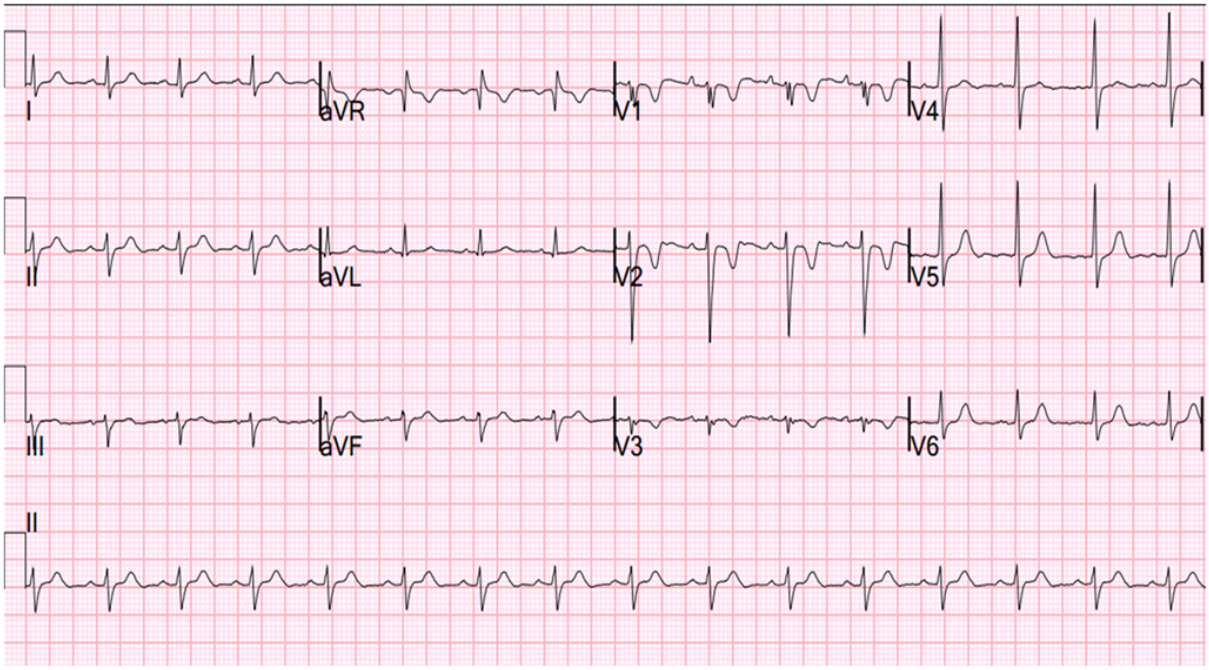
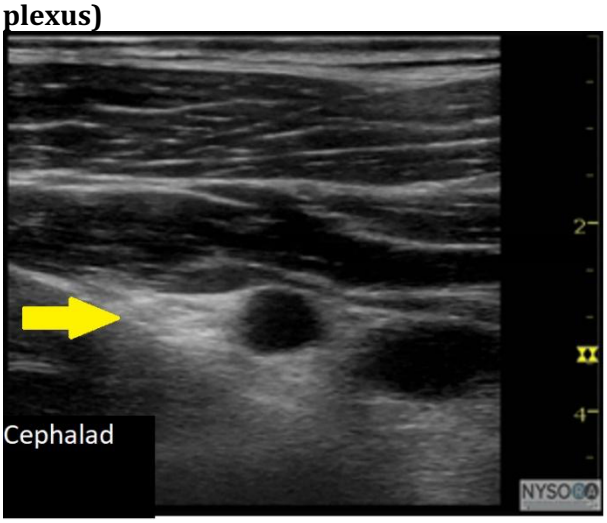
26. What is the axis of this ECG:



A. -75
B. -45
C. 0
D. 45
E. 90

Normal Axis is -30 - +90
Looking at Leads 1 and Lead 3 – Lead 1 positive and lead 3 negative – leaving each other – Left axis deviation
Negative deflection in lead 2 confirms that this is a genuine L Axis, and not just an axis between 0 to -30
The height discrepancy in the R wave and S Wave is more in lead 3 by only 1 small square, making this more likely to be an axis of -45 as opposed to -75
To accurately calculate value of axis, would need to draw vectors, and use a protactor

27. You're performing an infraclavicular block (Identify part of the brachial plexus)



A. Lateral Cord
B. Inferior Trunk
C. Posterior Cord
D. Medial cord
E. Superior trunk

The Cords are blocked with an infraclavicular block - the cords are situated in a U shape around the axillary artery, which is the vessel on the left on the above picture.
Identification of Cords
Lateral –Position 3 oclock axillary artery
Posterior – Position 6oclock
Medial – Position 9-10 oclock

28. High grade myopia in a patient undergoing cataract surgery. What is the single injection peribulbar block approach with the lowest risk of globe perforation?
A. Superonasal
B. Medial canthal
C. Lateral canthal
D. Inferotemporal
E. Superolateral

High Grade Myopia – associated with an increase in axial length of the globe – thus increased risk of perforation with tradition inferotemporal approach. With myopia the eyes is elongated, and its width increases less than the length – thus the medial canthal approach has the lowest risk of glove perforation.

29. Female 32 weeks pregnant (also remembered as 35wks). AST 400, INR 2.1 (alternative 2.3). Most likely diagnosis?
A. Acute cholestasis of pregnancy
B. HELLP syndrome
C. Severe pre-eclampsia
D. Acute fatty liver of pregnancy
E. Hyperemesis gravidarum

Hyperemesis ruled out because in 3rd trimester
Cholestasis ruled out, as ALT/AST doesn't get to this level, and coagulopathy not likely
Severe Pre-Eclampsia, HELLP and AFLP all have elevated LFTs and are difficult to differentiate
AFLP tend to have a greater derangement of LFTs, and are more likely to present with a coagulopathy according to uptodate

30. Someone on rivaroxaban is bleeding. What is the best method to reverse bleeding?
A. Vitamin K
B. Idarucizumab
C. Prothrombinex
D. FFP
E. Haemodialysis

Evidence is lacking regarding reversal of Factor Xa Inhibitors – Uptodate says

4 Factor Prothrombinex, which contains the factors on extrinsic pathway – 2,7,9,10, also apparently there is a modified recombinant inactive form of human factor Xa called andexanet

31. Patient on Ticagrelor has stopped for a neuraxial procedure. After how long can the maintenance dose be recommenced after the neuraxial procedure?
A. Immediately
B. After 6 hours
C. After 24hrs
D. After 2 days
E. After 7 days

Ticagrelor can be resumed immediately after needle placement/catheter removal, provided a loading dose of the drug is not administered – if a loading dose is administered an interval of 6 hours should be followed – ASRA recommendations

32. Patient with known vWB disease had a dental procedure and now has a bleeding tooth. What is the first line treatment?
A. Activated Factor VIIa
B. TXA
C. FFP
D. Factor VIII concentrate
E. Von Willebrand factor concentrate
ALT:
A. rFactor VII
B. rFactor VIII concentrate
C. Tranexamic acid
D. von Willebrand concentrate
E. Prothrombinex
F. Cryoprecipitate
Biostate(vWF and fVIII) and DD-AVP were not options

Apparently anti-fibrinolytics can be used in mild case or as an adjunct to ddavp
Von Willebrand Factor concentrate is reserved for more severe cases
Factor VIIA, has been used in patient who have developed alloantibodies to vWF concentrates after receiving replacement therapies

33. What is the warm ischaemia time for the kidneys for transplant?
A. 30mins
B. 45mins
C. 60mins
D. 90mins
E. 120mins

34. In the RELIEF study the liberal treatment group had 10mL/kg crystalloid at induction followed by 8mL/kg/hour during maintenance anaesthesia. What results did the trial demonstrate for this group.
A. Decreased acute kidney injury
B. Increased mortality
C. Decreased mortality
D. No difference in wound infection
E. Increased bowel anastomosis breakdown

35. Most effective prevention of post-herpetic neuralgia
A. Amitriptyline
B. Gabapentin
C. Aciclovir
D. Pregabalin
E. Oxycodone

Acute Pain management book

36. Crash-2 Study. What was the outcome for the TXA group?
A. Decreased mortality
B. Increased mortality
D. Decreased blood product use
E. No change mortality
F. Increased bleeding

37. Which is the most effective in treating neuropathic pain (lowest NNT)?
A. Gabapentin (NNT 4.3)
B. Venlafaxine (NNT 9.6)
C. Pregabalin (NNT 3.9)
D. Tramadol
E. Methadone
? Tricyclic as an answer

Was difficult to find a clear answer in pain book

38. Most common side effect after an iron ?polymaltose ?carboxymaltose infusion?
A. Hypophosphataemia
B. Anaphylaxis
C. Skin discolouration
D. Iron overload
E. Renal impairment
F. Fever

39. Which anaesthetic agent invalidates the OCP
A. Sugammadex
B. Rocuronium
C. Sevoflurane embolic
D. Dexamethasone
E. Flucloxacillin

40. Commonest cause of peri-operative stroke
A. Hypotensive
B. Embolic
C. Thrombotic
D. Hypertensive
E. Haemorrhagic
F. Ischaemic

41. Which has the highest capacity to absorb infrared radiation in the atmosphere?
A. Nitrous oxide
B. Sevoflurane
C. Desflurane
D. Isoflurane
E. CO2

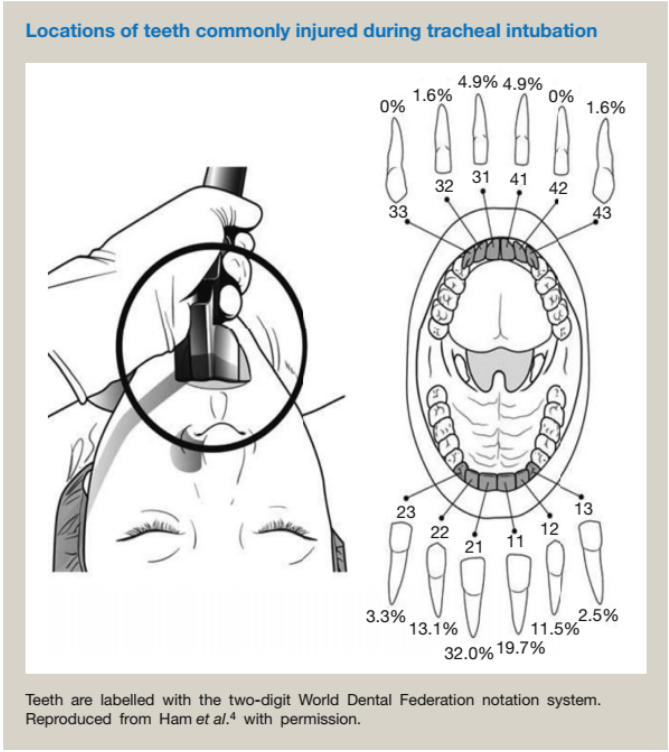
42. Dental damage risk to be determined in your department. 100 cases reviewed, zero cases of dental damage. What is the 95% confidence interval?
A. 0/100
B. 1/100
C. 3/100
D. 5/100
E. 9/100

43. In patients with cephalosporin cross reactivity to penicillin what is the causative component:
A. Thiazolidine ring
B. Beta lactam ring
C. R1 chain on the Beta Lactam ring
D. R2 chain on the thiazelidine ring
E. Dihydrothiazine ring

The R1 side chain as an antigenic determinant appears to explain the cross-reactivity that can be seen between certain beta-lactam antibiotics, as well as within the cephalosporin family. For example, aminopenicillins such as ampicillin and amoxicillin have similar R1 side chains to the aminocephalosporins cefalexin and cefaclor, and patients with sensitisation to the amino side chain have a risk of cross-reactive allergy between amoxicillin and cefalexin but can tolerate other (non-amino) penicillins and cephalosporins without this side chain.

https://www.nps.org.au/australian-prescriber/articles/cephalosporin-allergy-label-is-misleading

44. Which tooth is most commonly damaged in anaesthesia practice
A. Right maxillary central incisor
B. Left maxillary central incisor
C. Left maxillary lateral incisor
D. Right mandibular lateral incisor
E. Right 2nd mandibular molar
ALT:
A. Left maxillary central incisor
B. Left maxillary lateral incisor
C. Left mandibular central incisor
D. Right mandibular lateral incisor
E. Right maxillary premolar



Maxillary incisors are the most frequently affected teeth. The left is damaged more often than the right reflecting the fact that a right-handed laryngoscope blade is most commonly used amongst anaesthetists.
Dental damage in anaesthesia ANAESTHESIA AND INTENSIVE CARE MEDICINE 18:9 2017

45. Patient had a hysteroscopy and is now woken up in PACU. ABG done with Na 118, K 3.1. Patient is orientated to person but not to time and place. What is the best management?
A. Frusemide 40mg IV stat
B. Potassium 40mmol over 4 hours
C. 500ml Normal saline
D. 100ml 3% saline
E. Fluid restrict

Asymptomatic — In acutely hyponatremic patients with a serum sodium <130 mEq/L who are asymptomatic, we usually treat with a 50 mL bolus of 3 percent saline (ie, hypertonic saline) to prevent the serum sodium from falling further. However, we do not give hypertonic saline if the hyponatremia is already autocorrecting due to a water diuresis. Autocorrection can be suspected if the cause of hyponatremia has been reversed, urine output has increased, and the urine is dilute (specific gravity <1.005, osmolality <200 mosmol/kg, or urine cation concentration [the sum of the urine sodium and potassium concentrations] is less than one-half the serum sodium). Alternatively, autocorrection can be detected by remeasuring the serum sodium. However, the results of this remeasurement must be available expeditiously. A point-of-care sodium analyzer (if available) provides helpful and rapid information about the trajectory of the serum sodium in such patients.

We then monitor the patient for symptoms and remeasure the serum sodium concentration every one to two hours to determine the need for additional therapy.

Patients with self-induced water intoxication may have a further decline in serum sodium, even after presentation, due to delayed absorption of ingested water. In addition, patients who have ingested large volumes of water are volume expanded, which results in increased sodium excretion in the urine. If antidiuretic hormone (ADH) levels are high due to a nonosmotic stimulus such as nausea, the excretion of sodium in a concentrated urine will cause the serum sodium to fall, a phenomenon that has been called "desalination" [11].

Symptomatic (even mild symptoms) — In acutely hyponatremic patients with a serum sodium <130 mEq/L who have any symptoms that might be due to increased intracranial pressure (seizures, obtundation, coma, respiratory arrest, headache, nausea, vomiting, tremors, gait or movement disturbances, or confusion), we treat with a 100 mL bolus of 3 percent saline, followed, if symptoms persist, with up to two additional 100 mL doses (to a total dose of 300 mL); each bolus is infused over 10 minutes. An alternative approach, recommended in by European organizations, is to treat with two 150 mL bolus infusions of 3 percent saline, each given over 20 minutes, measuring the serum sodium between infusions [25].

The goal of therapy is to **rapidly** increase the serum sodium by 4 to 6 mEq/L over a period of a few hours. Raising the serum sodium by 4 to 6 mEq/L should generally alleviate symptoms and prevent herniation [11,12,26-31].

Based upon broad clinical experience, the administration of hypertonic saline is the only rapid way to raise the serum sodium concentration and improve neurologic manifestations and outcomes in patients with severe, symptomatic hyponatremia [12,18,21,32-35].

46. Transport cylinder. Water capacity 2L. Pressure gauge reads 150 Bar. Flows - O2 10L/min – longest it can last?

A. 15min
B. 30min
C. 45min
D. 60min
E. 2hrs

ALT:

A. 15 mins
B.30 mins
C. 45 mins
D. 90 mins
E. 120 mins

C size cylinder – 440 L at full capacity – at 10L/min

47. NAP 6 – Antibiotic with highest rate of anaphylaxis per use?
A. Teicoplainin
B. Vancomycin
C. Cefazolin
D. Amoxycillin
E. Cefoxatin

Different to previous question which was "antibiotic with highest rate of anaphylaxis overall in NAP6-> amoxicillin"

48. 70-year-old male in clinic for revision total hip operation in 10 days' time. Pre-operative blood results show:
Hb 110 (130-170 normal range)
Ferritin 31 (30-100 range)
Transferrin saturation 21% (normal 20-80)
CRP 10 (0.1-10 normal)
What is the best course of management?:

A. Proceed without further intervention
B. Blood transfusion
C. Oral iron, defer surgery for 6 weeks and recheck
D. Oral iron and proceed to surgery
E. IV iron infusion and proceed to surgery

49. Cell salvage – leukodepletion filters do not protect against?
A. Vernix
B. Alpha fetoprotein
C. Foetal RBC
D. Amniotic fluid
E. Foetal squamous cell

50. ANZCA mortality report 2012-2014 - what was the commonest cause of anaesthetic death?
A. Aspiration
B. Myocardial infarction
C. Inability to oxygenate and ventilate
D. Stroke
E. Anaphylaxis