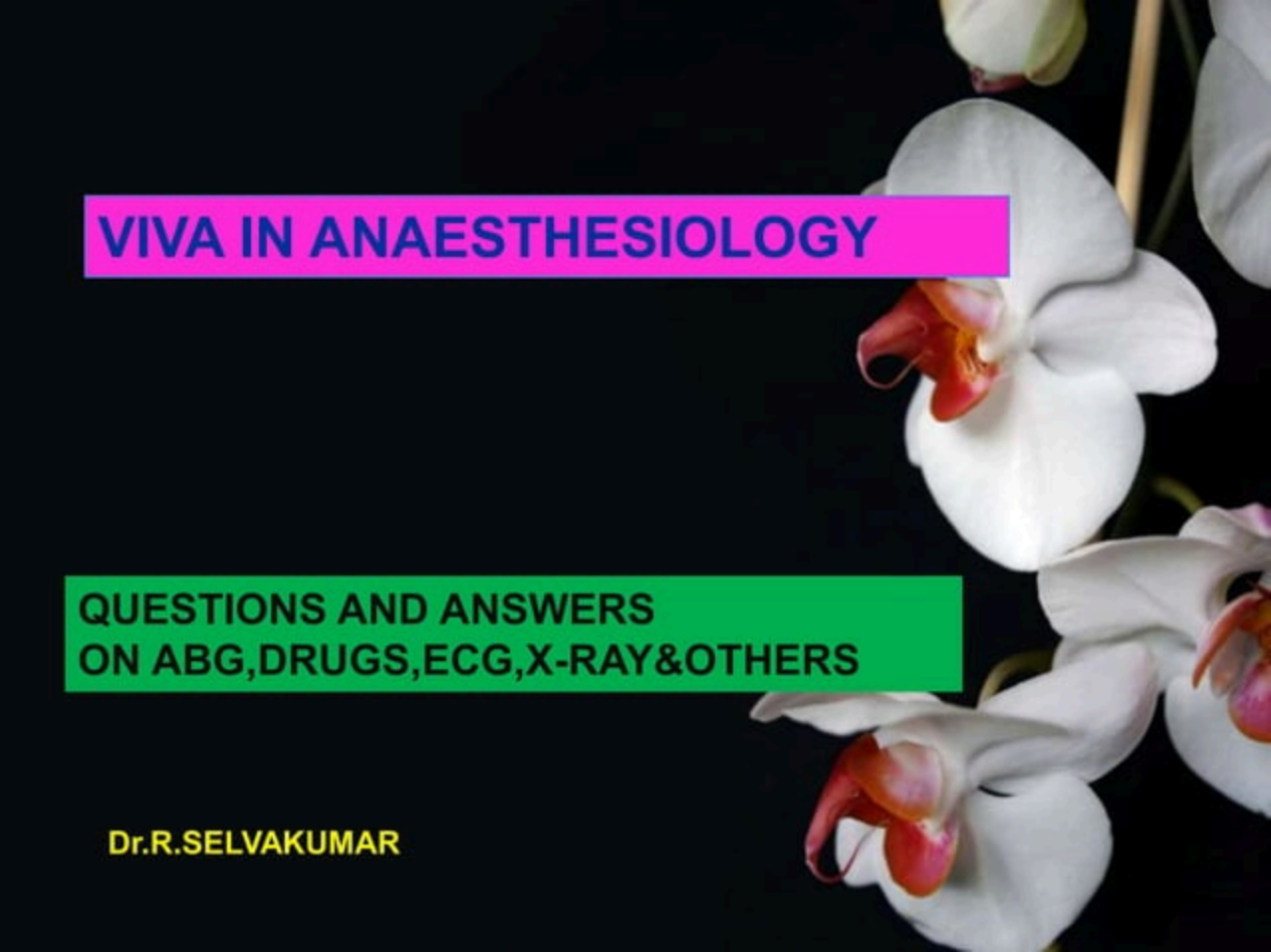
VIVA IN ANAESTHESIOLOGY

QUESTIONS AND ANSWERS
ON ABG,DRUGS,ECG,X-RAY&OTHERS

Dr.R.SELVAKUMAR



X-RAY INTERPRETATION

PREPP-16

1. HEART APPEARS BIGGER IN A-P VIEW X-RAY.

TRUE OR FALSE

TRUE. DUE TO THE INCREASED DISTANCE FROM THE FILM

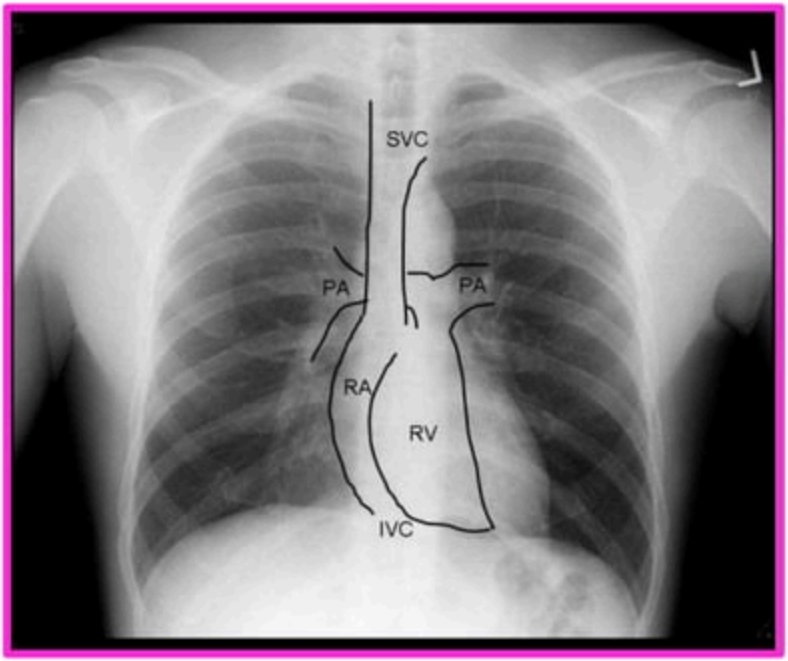
2. HOW WILL YOU KNOW THE FILM IS TAKEN IN FULL INSPIRATION?

IF THE FILM IS TAKEN IN FULL INSPIRATION, ANTERIOR ENDS OF LEFT 6 RIBS ARE VISIBLE ABOVE THE LEFT DOME OF DIAPHRAGM

3. WHAT ARE THE STRUCTURES WHICH CONTRIBUTE THE RIGHT HEART BORDER OF THE CARDIAC SHADOW IN X-RAY?

1. SVC
2. RIGHT PULMONARY ARTERY
3. RIGHT ATRIUM
4. IVC

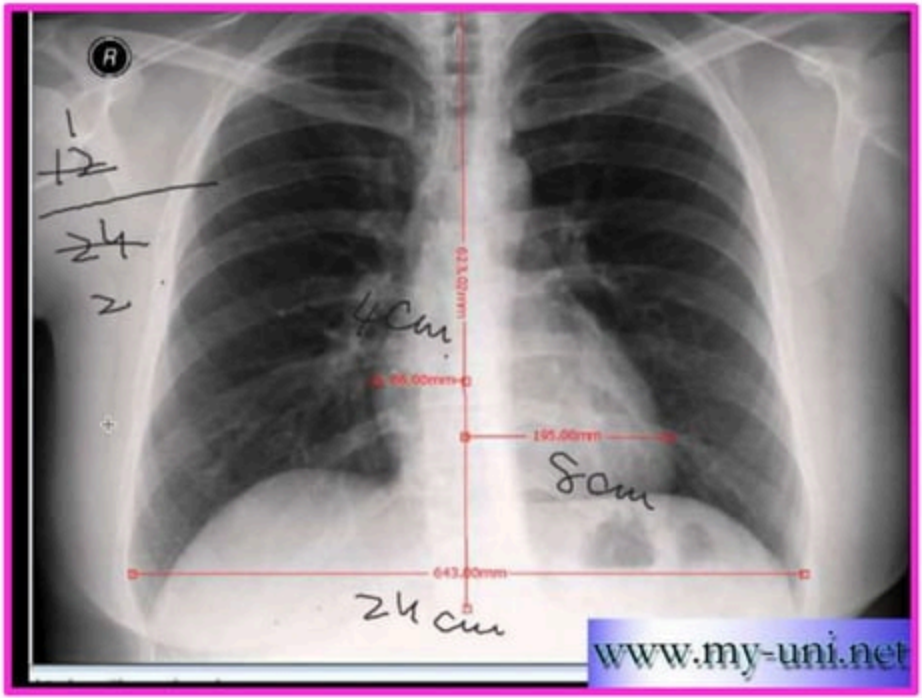
RIGHT HEART BORDER....



4. HOW WILL YOU DIAGNOSE "CARDIOMEGALY" IN CHEST X-RAY?

C-T RATIO MUST BE MORE THAN 50%

CT RATIO....



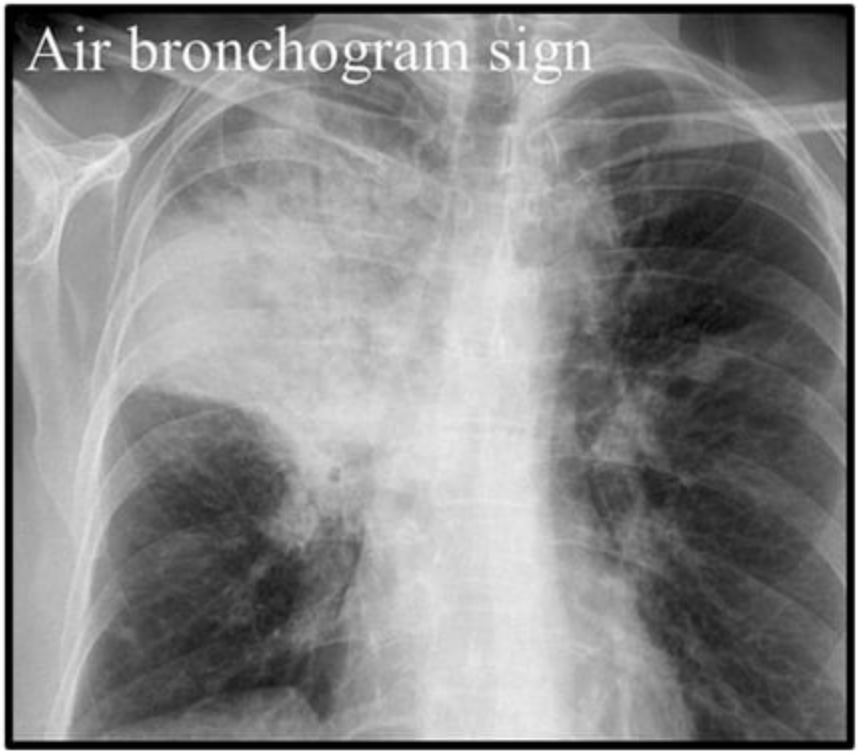
5. HOW MUCH FLUID IT TAKES TO OBLITERATE THE CARDIOPHRENIC ANGLE?

ATLEAST 150 -200 ML OF PLEURAL FLUID

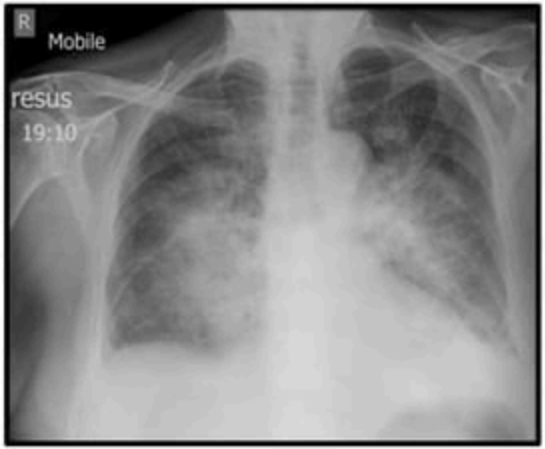
6. AIR BRONCHOGRAM IS GENERALLY VISIBLE IN

A. PNEMONIC CONSOLIDATION
B. PLEURAL EFFUSION
C. LUNG ATELECTASIS

PNEMONIC CONSOLIDATION


Air bronchogram sign

7. IDENTIFY BOTH THE X-RAYS: What is the difference between them?

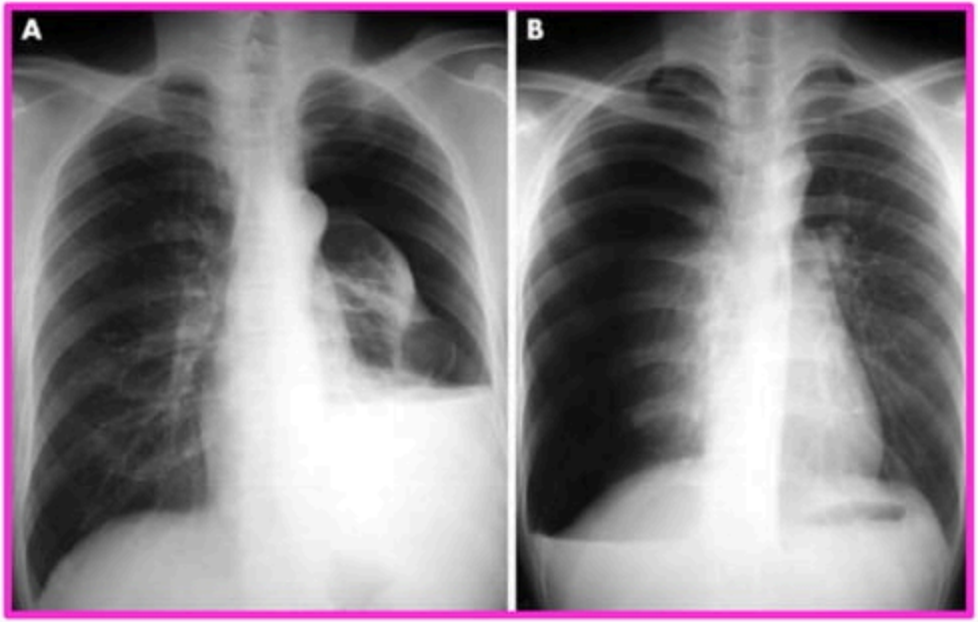


CARDIOGENIC AND NON-CARDIOGENIC PULMONARY OEDEMA

8. IDENTIFY THE XRAY AND HOW WILL YOU CLINICALLY CONFIRM THE DIAGNOSIS?

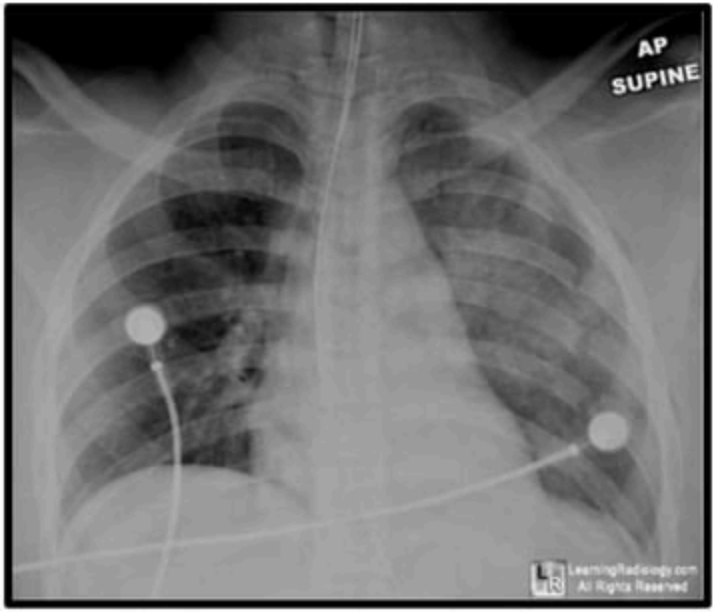
PNEUMOTHORAX –NEEDLE IN 2ND INTERCOSTAL SPACE

9. DIAGNOSE THIS CLINICAL CONDITION:



HAEMOPNEUMOTHORAX

11. IDENTIFY THE PROBLEM

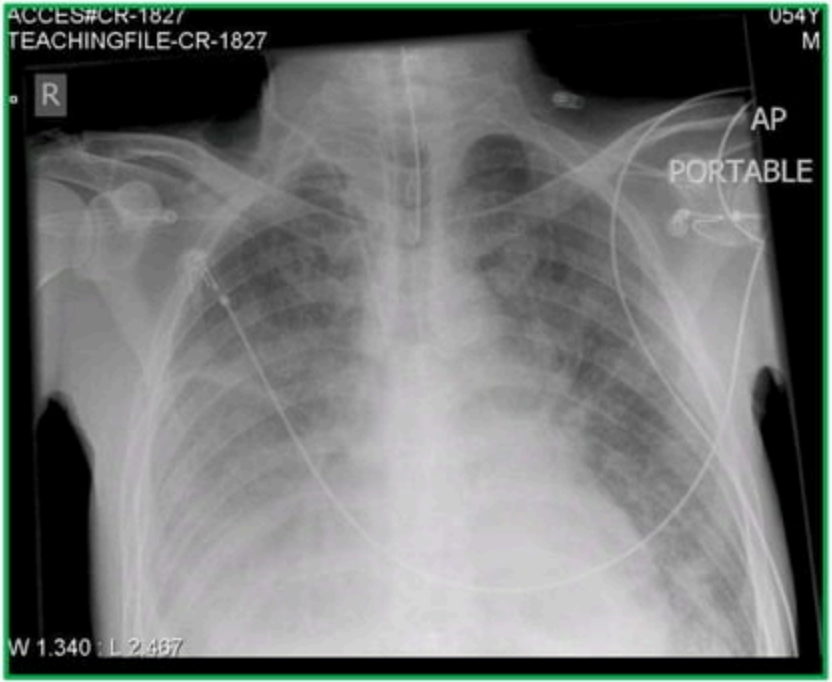


MULTIPLE RIB FRACTURES

10. DIAGNOSE THIS CLINICAL CONDITION:

BILAT RIB FRACTURE
?FLAIL CHEST

12. WHAT IS THE PURPOSE OF THIS CHEST X-RAY?



To confirm the ETT position

13.IDENTIFY THE PROBLEM:

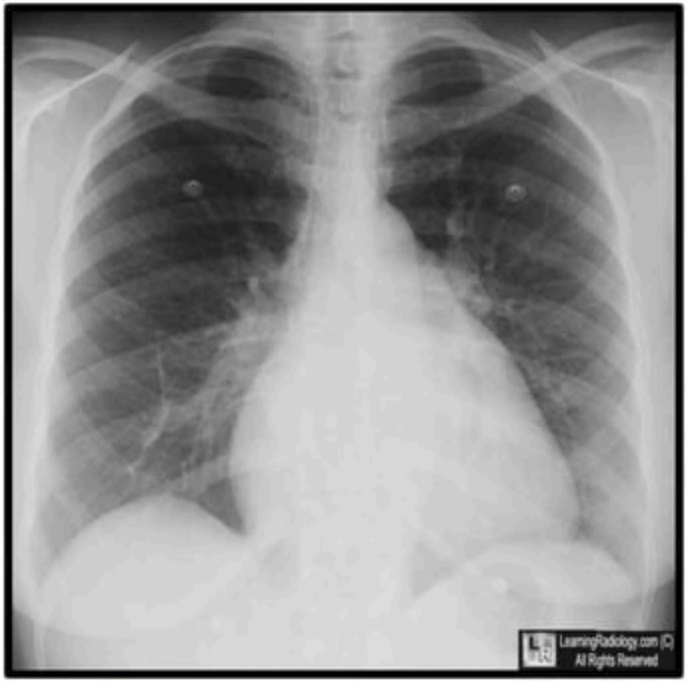
TRACHEAL COMPRESSION
BY THE ENLARGED THYROID

MRI NECK

HOW WILL YOU INDUCE & INTUBATE?

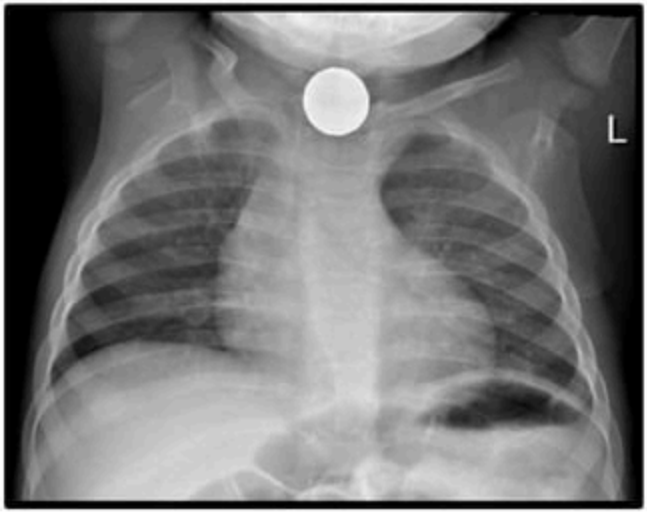
NEVER PARALYSE.
ELECTIVE TRACHEOSTOMY

15. WHAT IS THE CLINICAL DIAGNOSIS?



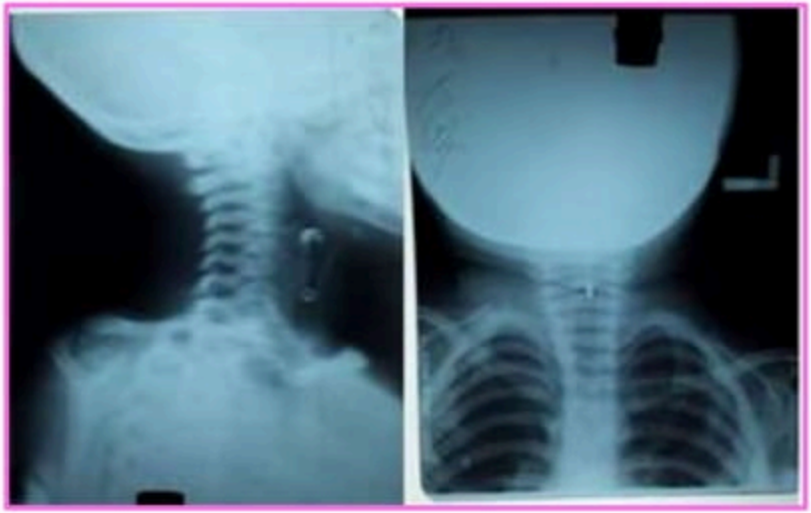
MITRAL STENOSIS

16. MENTION THE TYPE OF ANESTHESIA FOR THIS COIN RETRIEVAL
A. TIVA B. G.A SPONTANEOUS C. G.A-CONTROLLED



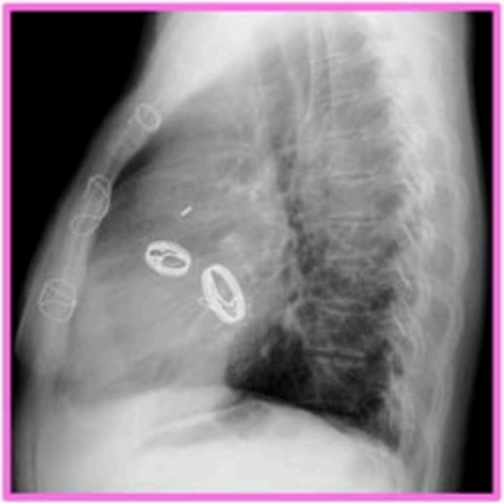
G.A -SPONTANEOUS

17. METHODS OF OXYGENATION DURING THIS F.B RETRIEVAL



- APNOEIC OXYGENATION
- SIDEARM VENTILATION
- JET VENTILATION

18. WHAT IS THE PROBLEM IN THIS PATIENT IF HE IS POSTED FOR AN EMERGENCY SURGERY?



PATIENT ON ANTICOAGULANTS

19. WHAT IS THE PROBLEM OF GIVING REGIONAL ANAESTHESIA FOR THIS PATIENT?

- UNBLOCKED VAGUS AND UNDERSURFACE OF DIAPHRAGM
- NEED FOR HIGH BLOCK

20.HOW WILL YOU INTUBATE THIS PATIENT?

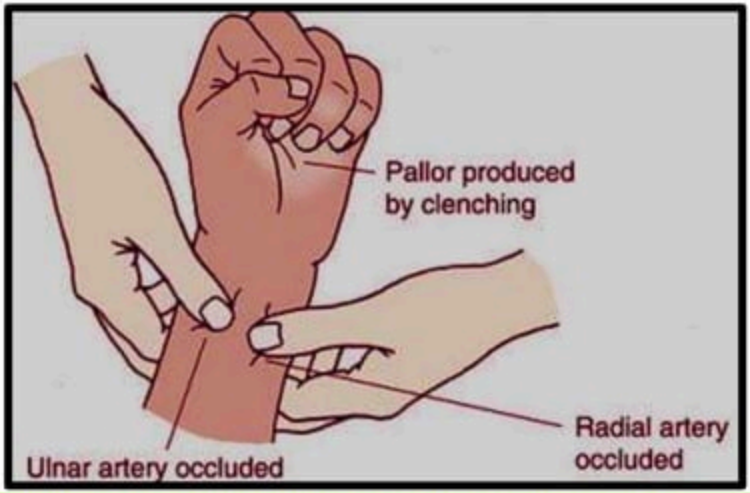
INTUBATION WITHOUT NECK EXTENSION WITH MILS

II. ARTERIAL BLOOD GAS INTERPRETATION

21.WHATS THE DIFFERENCE BETWEEN ALLEN'S AND MODIFIED ALLEN'S TEST?

The Allen's test assesses collateral circulation in the hand, in 2 steps. Step 1 occludes the radial artery for several minutes and compares the hand color to the other hand. The hand is said to have sufficient collateral circulation through the ulnar artery if there is no change in color. Step 2 occludes the ulnar artery. A change in hand color means the potential for radial artery occlusion is high. That is a positive Allen's test, which *contraindicates* radial-artery puncture

MODIFIED ALLEN'S TEST



OCCLUSION OF BOTH ULNAR AND RADIAL ARTERIES IN A BLANCHED FIST. THEN RELEASE OF ULNAR ARTERY. FLUSHING WITHIN 15 SECONDS IS NORMAL.

22. EXCLUDE THE TYPE I RESPIRATORY FAILURE FROM THE REST

1. BENZODIZEPINE POISONING
2. PNEUMONIA
3. COPD
4. HIGH SPINAL CORD LESION

PNEUMONIA

23. FIND OUT THE NORMAL ANION GAP ACIDOSIS AMONG THE FOLLOWING:

1. ILEOSTOMY
2. METHANOL POISONING
3. LACTIC ACIDOSIS
4. BROMIDE INTOXICATION

ILEOSTOMY

24.FOLLOWING ARE THE SIDE EFFECTS OF BICARB THERAPY FOR TREATING METABOLIC ACIDOSIS:

1. INTRACELLULAR ACIDOSIS
2. HYPEROSMOLARITY
3. ALKALOSIS
4. SHIFT OF ODC TO RIGHT

SHIFT OF ODC TO THE RIGHT

25. READ THE FOLLOWING ABG REPORT

pH...7.2
paCO2...26
paO2...72
HCO3...16
BE..-10.5
FIO2...0.30 -

METABOLIC ACIDOSIS WITH RESP.ALKALOSIS

26. COMMENT UPON THE FOLLOWING ABG

pH...7.32
paCO2....68
paO2...65
HCO3...31.5
BE..7.1
FIO2...0.21
SaO2...95%

Chronic respiratory acidosis with Compensatory metabolic alkalosis

27. DIAGNOSE THE FOLLOWING ACID-BASE DISORDER:

pH..7.21
pCO2...52
paO2..56
HCO3...18
BE...-4.2
FIO2...0.3

Super added acute metabolic acidosis in a patient With chronic respiratory acidosis with met.alkalosis

28.WHAT IS THE ABNORMALITY IN THE FOLLOWING ABG

pH...7.41
paO2...122
paCO2...34
HCO3...23.4
BE...-0.8
FIO2..0.21

Air contamination in the blood sample

29. WHAT IS THE IMPACT OF TOO MUCH HEPARIN IN THE SYRINGE MEANT FOR TAKING BLOOD SAMPLE FOR ABG?

1. SPURIOUS ALKALOSIS
2. INCREASED SODIUM LEVEL
3. DECREASED CALCIUM LEVEL
4. SPURIOUS ACIDOSIS

INAPPROPRIATE LOW pH.

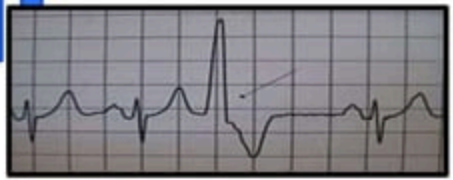
30.WHAT IS THE FORMULA TO CALCULATE THE HCO3 DOSE TO TREAT THE METABOLIC ACIDOSIS?

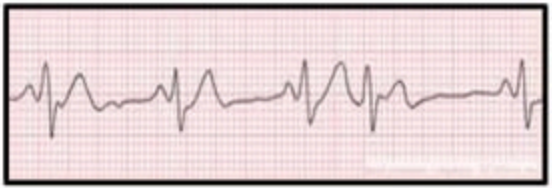
B.D X BODY WEIGHT X 0.3

31. WHICH DRUG POISONING PRODUCES RESPIRATORY ALKALOSIS?

ASPIRIN -SALICYLATES

ELECTROCARDIOGRAPH INTERPRETATION





32. DIFFERENCES BETWEEN TWO E.C.G TRACES:

ATRIAL PREMATURE BEAT	VENTRICULAR
ABNORMAL P WAVE	ABSENT P WAVE
NORMAL QRS	WIDE QRS
NORMAL T WAVE	OPPOSITE TO QRS
SHORT COMPENSATORY PAUSE	FULL COMPENSATORY PAUSE

33. DIAGNOSE THE FOLLOWING ARRHYTHMIA

MULTIFOCAL VENTRICULAR EXTRA-SYSTOLES

34. WHAT IS GOING ON HERE?

R ON T PHENOMENON LEADING TO V.T

35. DIAGNOSE THE FOLLOWING ECG AND DRUG OF CHOICE FOR THE TREATMENT.

ATRIAL FIBRILLATION
Dofetilide ,Flecainide , Ibutilide
Propafenone ,Amiodarone

36. WHAT IS THE FIRST DOSE OF DEFIBRILLATION?

120-200J IF IT IS A BIPHASIC DEFIBRILLATOR

360 J IF IT IS A MONOPHASIC

37.DOSE OF ADRENALINE IN ACLS-2015

1 mg EVERY 3-5 MINUTES

38. DIAGNOSE THE FOLLOWING ECG:

PACEMAKER SPIKES

39. ECG RECORDED AFTER INTERCOSTAL NERVE BLOCK. WHAT COULD BE THE REASON?

BUPIVACAINE TOXICITY-I DEGREE HEART BLOCK

40. WHICH INHALATIONAL AGENT IS NOTORIOUS IN CAUSING THE FOLLOWING ARRHYTHMIA?

HALOTHANE-SINUS BRADYCARDIA

41. WHAT IS THE FIO2 OF EXPIRED AIR RESUSCITATION?

14-16%

42. WHAT IS THE CHEST COMPRESSION RATE IN ACLS 2015?

100 -120 /MIN

43.WHAT IS THE NEW GUIDELINE ADDED IN ACLS-2015

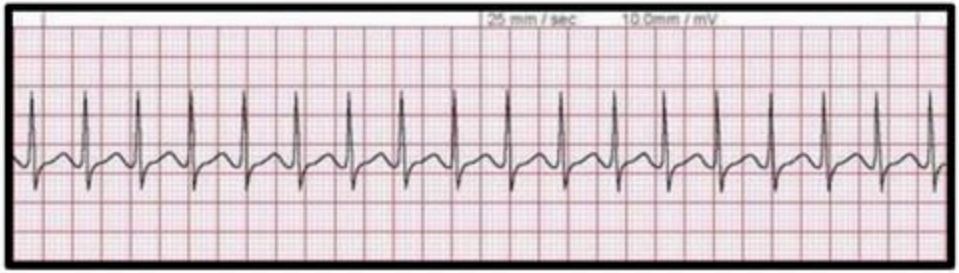
Use of Social Media to Summon Rescuers

2015 (New): It may be reasonable for communities to incorporate social media technologies that summon rescuers who are in close proximity to a victim of suspected OHCA and are willing and able to perform CPR

44.WHAT IS THE DOSE OF INTERNAL CARDIAC DEFIBRILLATION?

5 J

45. **WHAT ARE THE NON-PHARMACOLOGIC METHODS OF TREATMENT OF THIS ARRHYTHMIA?**



VAGAL MANOEUVRES-VALSALVA, CAROTID SINUS MASSAGE

DRUGS

46. WHAT IS THE PROBLEM OF LONG TERM INFUSION OF PROPOFOL IN I.C.U?

PROPOFOL INFUSION SYNDROME-
Impaired mitochondrial fatty acid metabolism

47. WHAT IS THE ACTIVE METABOLITE OF DIAZEPAM?

DESMETHYL DIAZEPAM

48. FIND OUT THE DRUG:

1. ANTAGONISTIC ACTION AT GABA A AND GABA B

2. ALSO USED TO REVERSE THE CNS DEPRESSANT EFFECT OF ALCOHOLIC INTOXICATION

FLUMAZENIL

49. WHAT IS THE THERAPEUTIC RANGE OF PLASMA LEVEL OF MAGNESIUM AND ONE WHICH CAUSES RESPIRATORY PARALYSIS?

THERAPEUTIC-4 – 6 meq/l
TOXIC – 20 – 25 meq/l

50. WHICH DRUG IS ADDED TO DROPERIDOL AND FENTANYL TO MAKE IT A COMPLETE NEUROLEPTANAESTHESIA?

INHALATIONAL AGENT ESPECIALLY NITROUS OXIDE

51. NAME TWO OTHER DRUGS WHICH ARE METABOLISED BY PSEUDOCHOLINE ESTERASE:

MIVACURIUM
MEPIVACAINE

52. WHY THE ENZYME "PEUDOCHOLINE ESTERASE" IS NAMED SO?

- PRESENT IN THE PLASMA
- SUBSTRATE NON-SPECIFIC

53. WHAT IS THE NORMAL DIBUCAINE NUMBER?

80

54. WHAT IS THE PRIME METABOLIC PATHWAY OF ATRACURIUM?

ESTER HYDROLYSIS

55. NAME ANY OTHER TWO CONDITIONS WHERE ANTICHOLINEESTERASES ARE USED APART FROM REVERSAL?

MYASTHENIA GRAVIS
SNAKE BITE

56. RULE THE ODD MAN OUT:

1. MEPIVACAINE
2. ETIDOCAINE
3. TETRACAINE
4. LIGNOCAINE

TETRACAINE- ESTER GROUP

57. NAME THE LOCAL ANAESTHETIC DRUG INVENTED BY DRUG RESEARCH LABORATORY,LUCKNOW:

CENTBUCRIDINE

58. WHAT IS THE pKa OF LIGNOCAINE?

7.8

59. WHICH REGIONAL NERVE BLOCK CAUSES THE HIGHEST PLASMA LEVEL OF L.A IN A SHORTEST TIME?

INTERCOSTAL NERVE BLOCK

60. WHAT ARE THE TWO TYPES OF PRIMARY ALKALOIDS FOUND IN THE EXTRACT OF POPPY?

PHENANTHRENES
BENZYL ISOQUINOLONES

61. WHICH ANAESTHETIC DRUG WAS BLAMED FOR THE DEATH IN THE WAR CASUALITIES OF PEARL HARBOUR?

THIOPENTONE

62. ARRANGE IN ASCENDING ORDER WITH REGARDS TO OIL:GAS PARTITION COEFFICIENT:

1. ISOFLURANE
2. DESFLURANE
3. HALOTHANE
4. SEVOFLURANE

1. DESFLURANE - 18.7
2. SEVOFLURANE - 47
3. ISOFLURANE – 90.8
4. HALOTHANE - 224

63. COMPLETE THE STATEMENT REGARDING ATROPINE...

HOT AS A HARE....

HOT AS A HARE
MAD AS A HEN
BLIND AS A BAT
RED AS A BEET
DRY AS A BONE....

64. WHAT IS THE DOSE OF VASOPRESSIN IN CPR?

40 UNITS –I.V PUSH

66. WHAT IS THE ADRENALINE DOSE IN EPIDURAL TEST DOSING?

15 µg IN 3 ML OF 1.5 % LIGNOCAINE

67. WHICH DRUG ACTS AS FAST AS I.M KETAMINE IN PRODUCING SEDATION IN PAEDIATRIC CASES? (NOT IN USE NOW...)

PARALDEHYDE

68.NAME THE DRUG STORED AS A CRUDE EXTRACT IN THIS UTENSIL:

CURARE

69. DOSE OF SUGGAMADEX

2 – 4 mg / k.g

pentafluoroisopropenyl fluoromethyl ether (PIFE, C4H2F6O),

70. WHAT IS THE COMMON NAME FOR THE ABOVE CHEMICAL?

COMPOUND-A

CAPNOGRAPH,PFT & SONOANATOMY

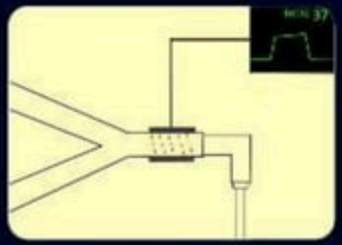
71. IN WHICH TYPE OF CAPNOGRAM, TIME DELAY IS MINIMAL?

MAINSTREAM CAPNOGRAM

Capnography

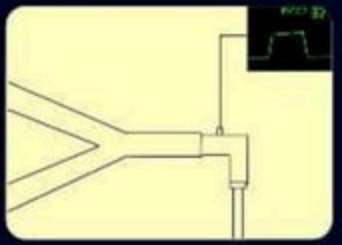
The 2 Types of Capnometers

Mainstream



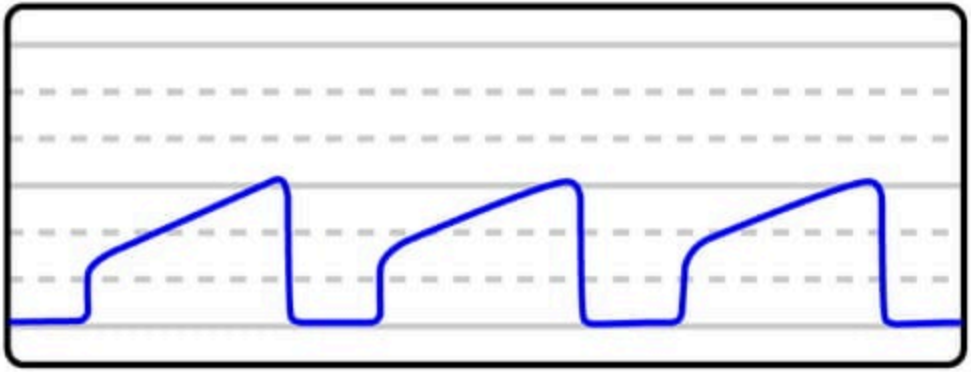
The infrared sensor is in the direct path of the gas source, and connected to the monitor by an electrical wire.

Sidestream



The sample of gas is aspirated into the monitor via a lightweight airway adapter and a 6ft length of tubing. The actual sensor is inside the monitor.

72. FIND OUT THE POSSIBLE REASON FOR THIS KIND OF TRACE..



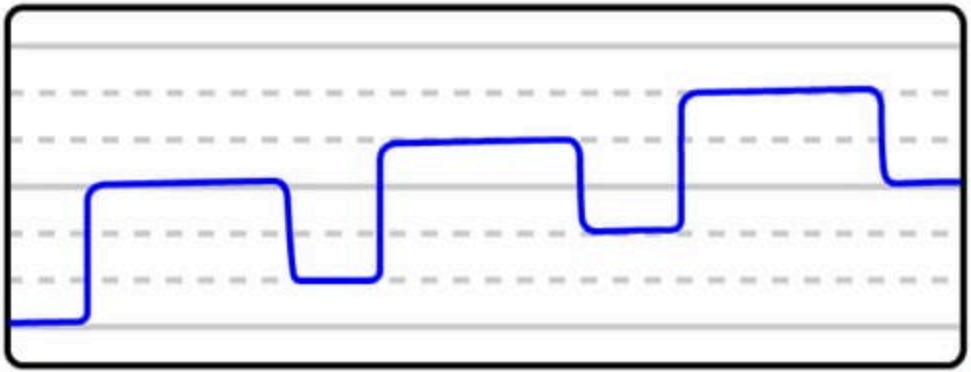
LOWER AIRWAY OBSTRUCTION –SHARK FIN APPEARANCE

73.IDENTIFY THIS SIGNATURE CAPNOGRAM:

how equipment works .com

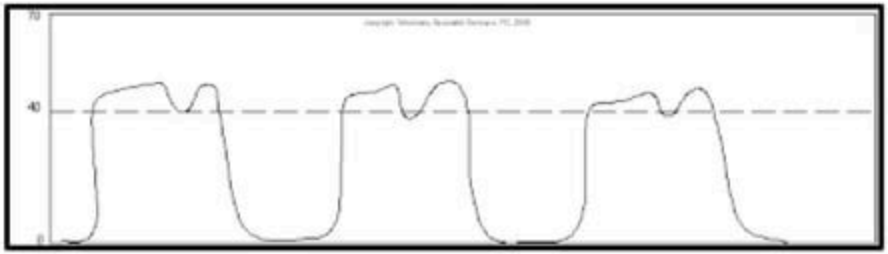
- HYPOVENTILATION
- MALIGNANT HYPERPYREXIA

74. HOW TO RECTIFY THE PROBLEM?



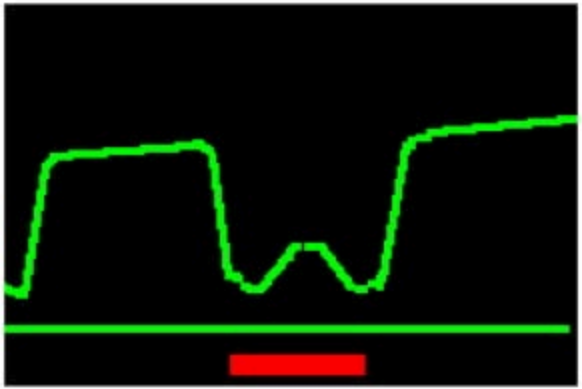
CHECK ALL THE CAUSES FOR REBREATHING

75. WHY THIS CLEFT APPEARS IN THE EXPIRATORY PLATEAU?



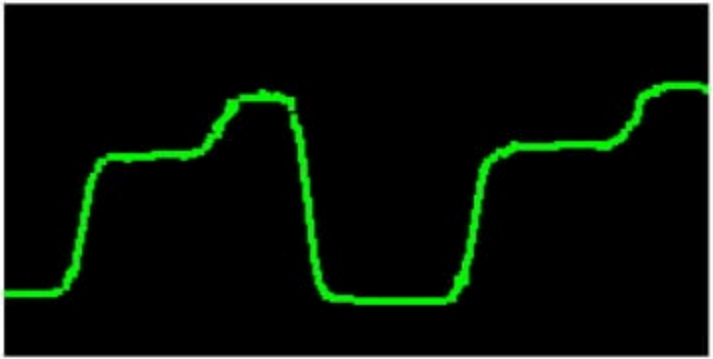
ATTEMPTED SPONTANEOUS BREATH IN A PARALYSED PATIENT-CURARE CLEFT

76. IDENTIFY THIS SIGNATURE CAPNOGRAM:



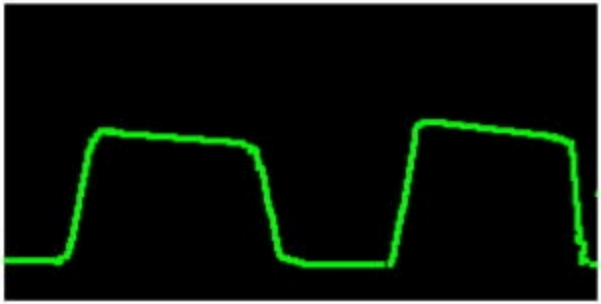
BAIN HUMP

77. WHY THERE ARE TWO PEAKS?



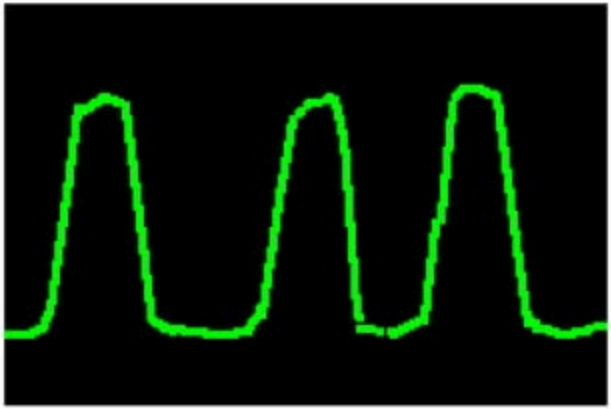
- LOOSE CONNECTION BETWEEN SAMPLING LINE AND CAPNOGRAPH
- ONE LUNG TRANSPLANT
- ETT CLOSE TO CARINA

78. IDENTIFY THE ABNORMALITY IN THIS CAPNOGRAM:



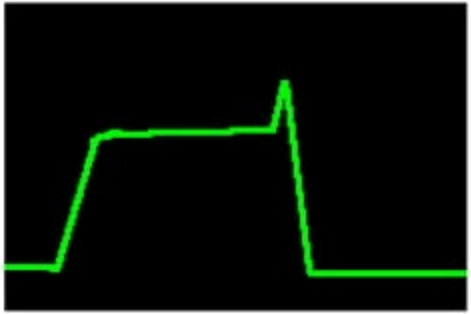
reverse phase 3 slope seen in patients with emphysema.

79. COMMENT UPON THIS CAPNOGRAM:



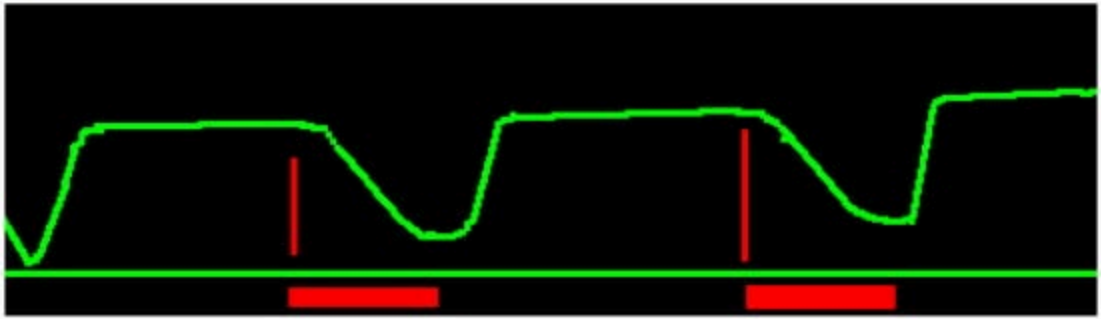
CAPNOGRAM IN A SPONTANEOUSLY BREATHING ADULT

80. WHAT IS THE NAME OF THIS TYPE OF WAVEFORM AND WHAT IS THE REASON?



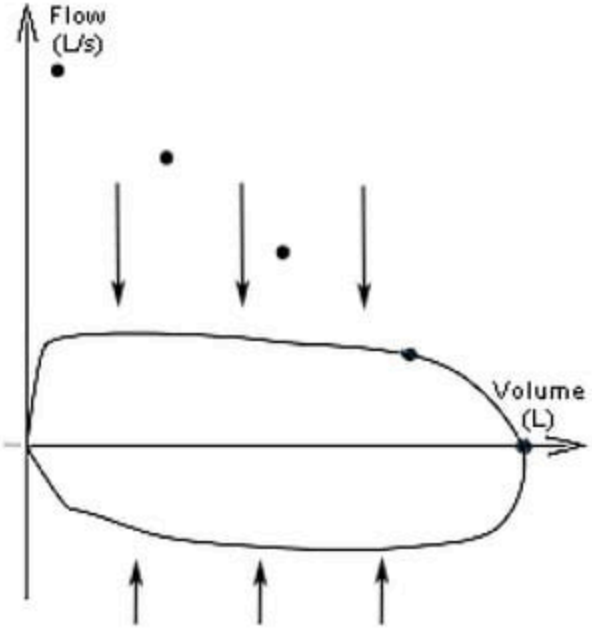
PIG TAIL CAPNOGRAM-CRUSHED SAMPLING TUBE

81. WHAT IS THE PROBLEM HERE?



**INSPIRATORY VALVE MALFUNCTION-
EXTENDING THE ALVEOLAR PLATEAU
OF PHASE-III**

82. IDENTIFY THE PROBLEM IN THIS FLOW-VOLUME LOOP



FIXED AIRWAY OBSTRUCTION

83. IDENTIFY THE PATHOLOGY

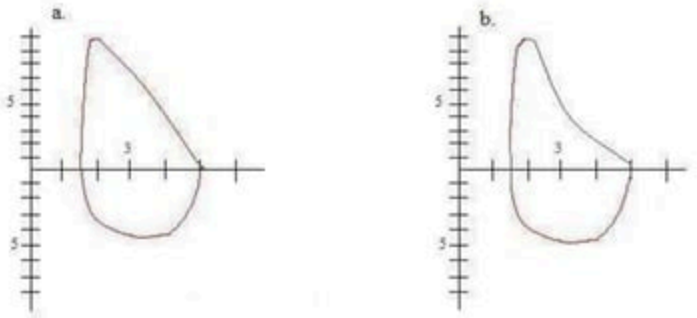


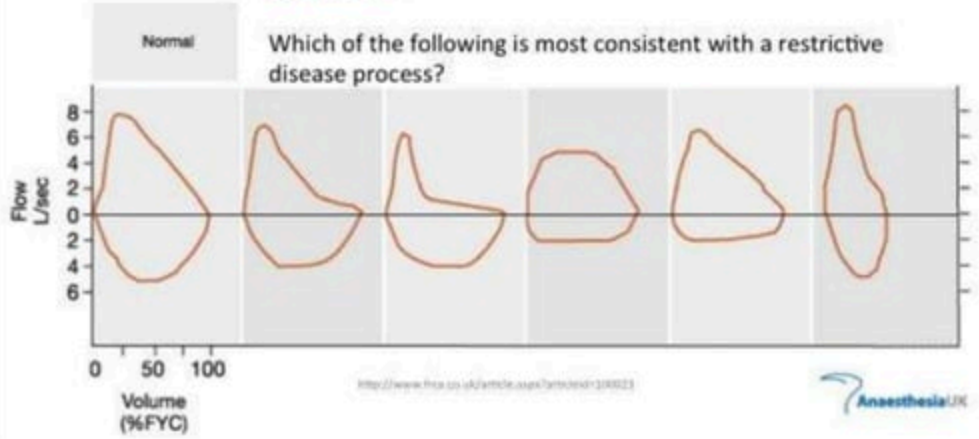
Figure 2 - A normal flow-volume loop is shown in Figure 2a. Figure 2b shows an obstructive defect, with marked scooping. X-axis is volume, Y-axis is flow.

AIRWAY OBSTRUCTION DURING FORCED EXPIRATION -ASTHMA

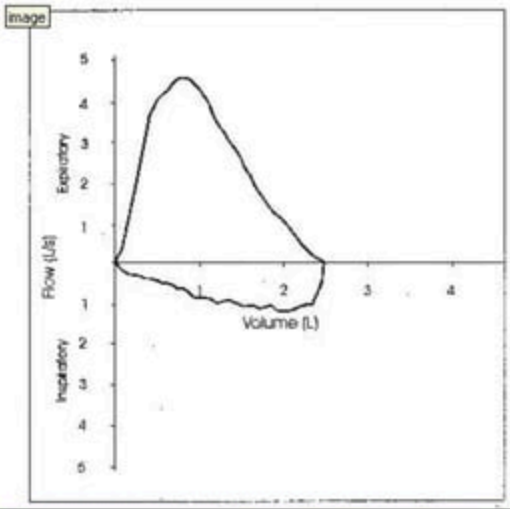
84. IDENTIFY THE RESTRICTIVE PATTERN

QUESTION:

Which of the following is most consistent with a restrictive disease process?



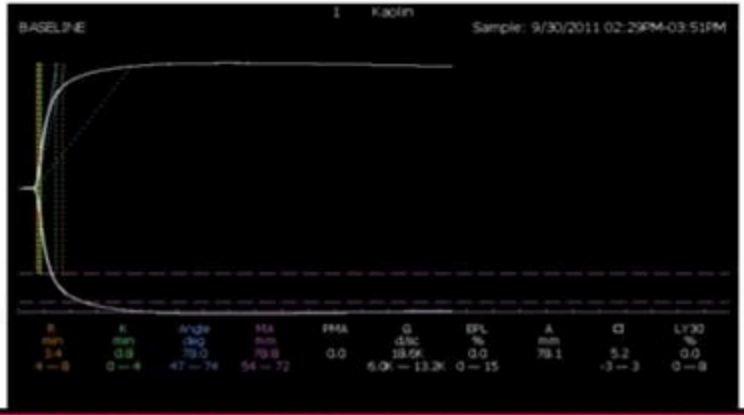
INCREASED STEEPNESS IN THE FLOW CURVES AND REDUCTION IN BOTH TLC AND FRC.



85. IDENTIFY THE PROBLEM

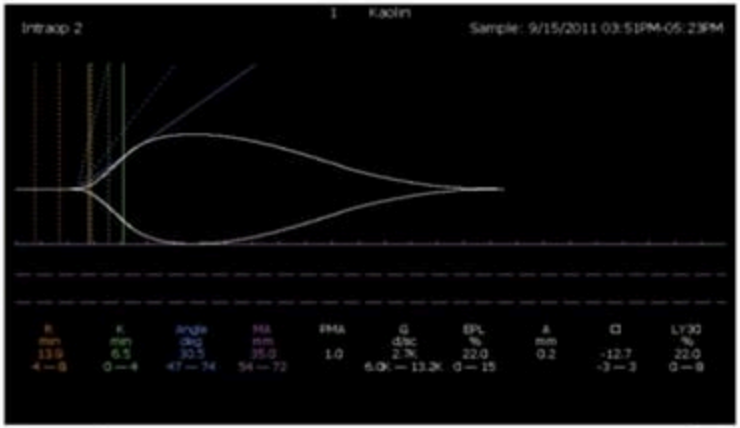
VARIABLE EXTRA THORACIC OBSTRUCTION

HYPERCOAGULATION STATE



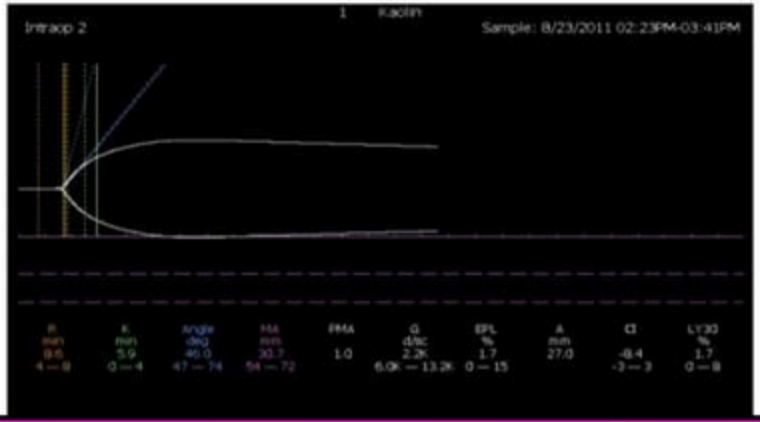
86. IDENTIFY THE PROBLEM IN THIS TEG

FIBRINOLYSIS



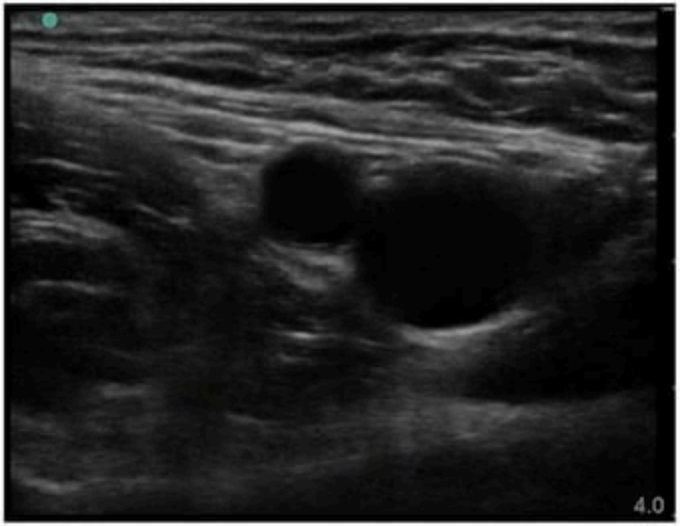
87. READ THIS TEG PICTURE

THROMBOCYTOPENIA



88. DIAGNOSE THE FOLLOWING CONDITION

89.IDENTIFY THE NERVE

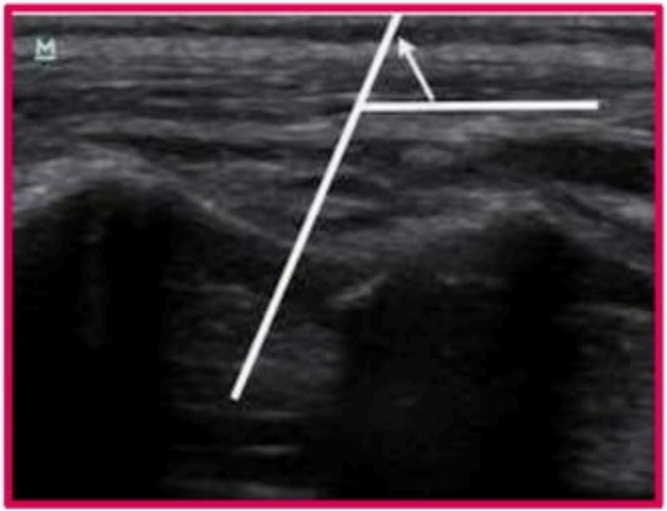


FEMORAL NERVE

90. WHAT TYPE OF BLOCK IS DEMONSTRATED HERE ?

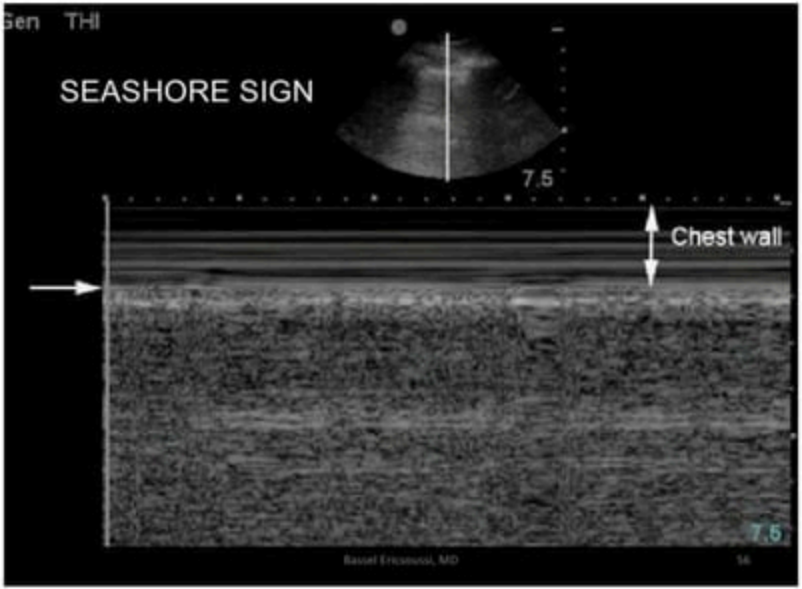
TAP BLOCK

91. WHAT IS BEING MEASURED HERE?



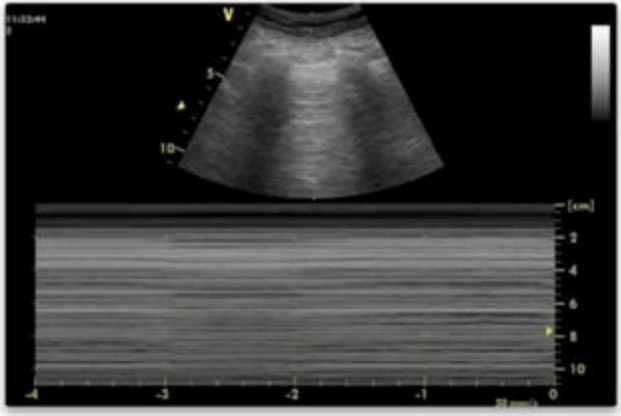
DEPTH OF SUBARACHNOID SPACE

92. WHAT DO YOU MEAN BY SEASHORE SIGN?.



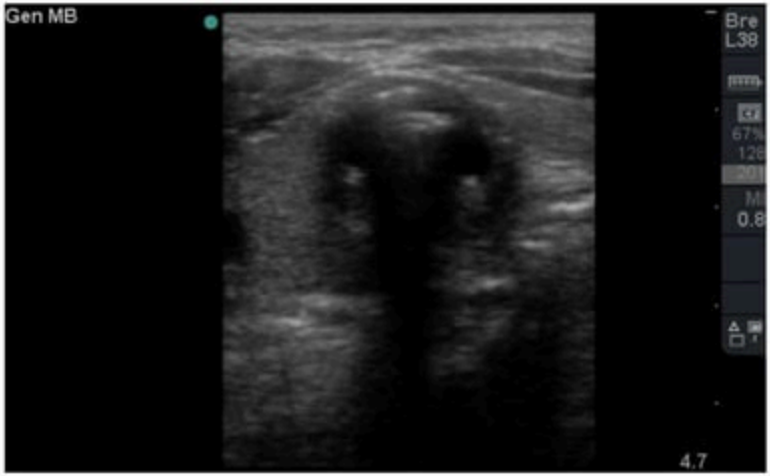
In M-Mode- Motionless parietal tissues over the pleural line and granular lung behind.

93. When will you get this picture?



Absence of lung sliding and loss of granular pattern- PNEUMOTHORAX

94.WHAT IS BEING CONFIRMED HERE?

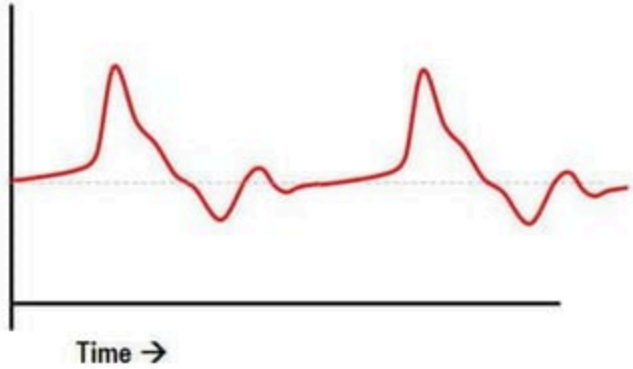


ENDOTRACHEAL TUBE PLACEMENT

95. READ THE ABNORMAL CVP TRACE

CONSTRICTIVE PERICARDITIS

96. READ THE CVP TRACE



CANNON WAVES

MISCELLANEOUS

97. WHICH ANAESTHETIC DRUG HE IS USING FOR THE HUNTING?

CURARE

98.WHICH DRUG IS EXTRACTED FROM THIS PLANT?

D-TUBOCURARINE

99.WHAT ARE THE ACTIVE ALKALOIDS IN THIS PLANT?

ATROPINE,SCOPOLAMINE

100. WHICH DRUG IS INVOLVED IN THIS STORY?

MANDRAGORA PLANT -SCOPOLAMINE

101. GREAT DISCOVERY STARTED FROM THIS PLANT. WHAT IS THAT DRUG?

ERYTHROXYLON COCA- COCAINE

102. WHICH DRUG IS RELATED TO THIS BEAUTIFUL PLANT?

MORPHINE –PAPAVER SOMNIFERUM

103. WHAT IS THE SPECIALITY IN THIS SPRAY?

- ONCE IT WAS USED AS AN INDUCTION AGENT
- NOW USED AS AN CRYOANALGESIC

104. TELL ME ONE INHALATIONAL AGENT WITH A BOILING POINT MORE THAN WATER:

METHOXYFLURANE
BOILING POINT -104.8 C
O:G PARTITION COEFFICIENT- 950

105. STATE OF WASHINGTON USES THIS DRUG TO EXECUTE THE DEATH SENTENCE IN A SINGLE DOSE OF 5 gram. WHAT IS THIS DRUG?

THIOPENTONE

106.WHO IS THE MAN WHO SUGGESTED CHLOROFORM TO SIMPSON?

DAVID WALDIE

107.WHAT WAS THE TYPE OF ANAESTHESIA GIVEN TO MAHATMA GANDHI FOR HIS APPENDICECTOMY ON 12TH JANUARY,1925?

OPEN DROP CHLOROFORM

108. WHEN AND WHERE ETHER WAS USED IN INDIA FIRST TIME?

22nd MARCH,1847- MEDICAL COLLEGE HOSPITAL,CALCUTTA

JAI HO...

dr.r.selvakumar
professor of anaesthesiology
k.a.p.viswanatham govt medical college,
trichy