

**QUIZ 14<sup>th</sup> March 2018 (answers below)**

- 1. What are the landmarks for safe chest tube insertion?**
- 2. What is the Jo'burg knot for tying in chest tubes?**
- 3. What are the zones used to describe penetrating neck trauma?**
- 4. What are clinical signs of laryngeal injury?**
- 5. Describe and interpret the following ECG.**

95 . Sinus rhythm. . . . .normal P axis, V-rate 60- 99  
 632 . Ventricular preexcitation(WPW). . . . .Delta waves  
 168  
 D 149  
 408  
 513

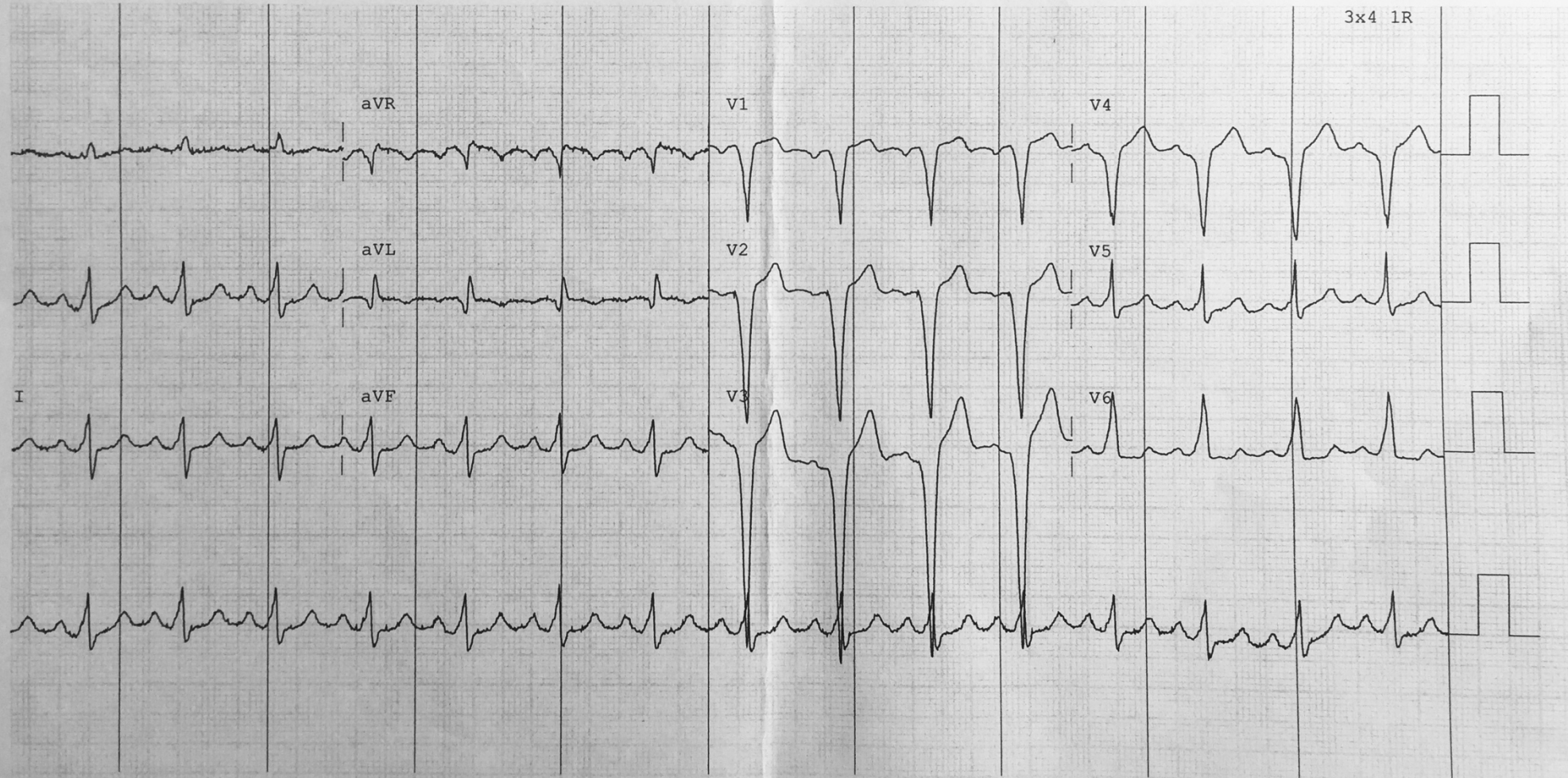
Room: ED 9

XIS--  
 72  
 52  
 84

- ABNORMAL ECG -

Lead ECG Report (Standard)

Unconfirmed Diagnosis

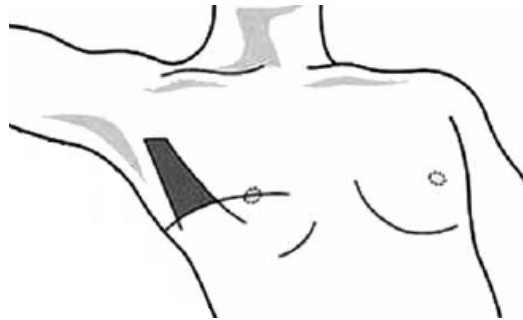


## QUIZ answers 14<sup>th</sup> March 2018

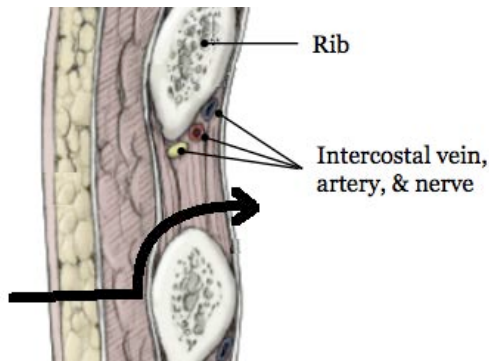
### 1. What are the landmarks for safe chest tube insertion?

*The Triangle of Safety*

*Above the nipple level  
Anterior to mid axillary line  
Posterior to pectoralis major*



*Inserting onto and then over  
the rib, thereby avoiding the  
neurovascular bundle  
underneath each rib*



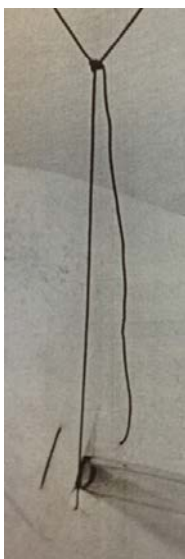
### 2. What is the Jo'burg knot for tying in chest tubes?

*Everyone has their favourite way, but I think this knot is pretty cool.*

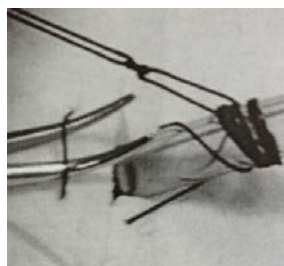
*From Maritz D A Novel Way to Secure a Chest Drain Ann R Coll Surg Engl 2014; 96: 75–83 but subsequently found to be not so novel, and well known in South Africa as the Jo 'burg knot.*

Make horizontal mattress suture

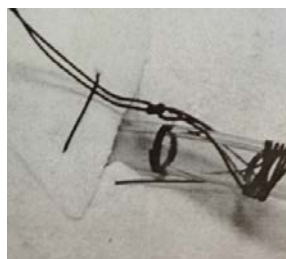
Tie a simple knot half way up the free ends



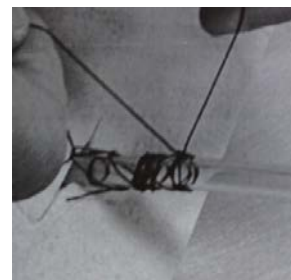
Wrap the free ends  
together around the  
tube going further  
than the knot



Pull the remaining length  
of free ends under the  
horizontal suture

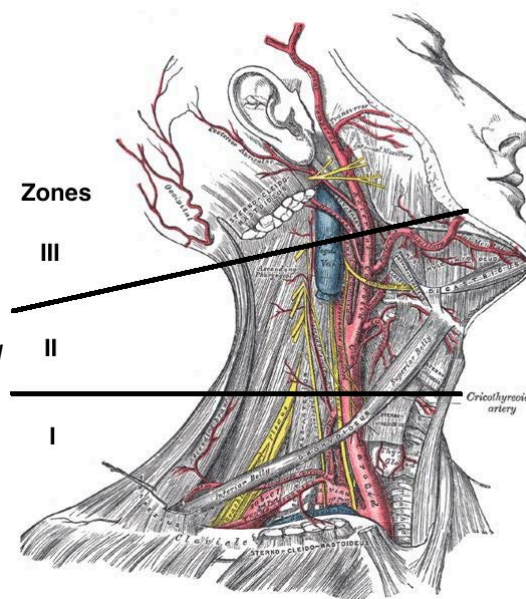


Separate the ends.  
Wrap them in opposite  
directions around the  
tube. Tie off with  
surgical knot



### 3. What are the zones used to describe penetrating neck trauma?

- Zone III  
Base of skull to angle of mandible
- Zone II  
Angle of mandible to level of cricoid
- Zone I  
Level of cricoid to thoracic inlet



### 4. What are clinical signs of laryngeal injury?

- Distortion of the normal anatomic appearance*
- Pain on palpation or with coughing or swallowing*
- Dyspnea*
- Hoarseness, voice alteration*
- Stridor*
- Drooling*
- Subcutaneous emphysema and/or crepitus*
- Sucking, hissing, or air frothing or bubbling through the neck wound*
- Hemoptysis*

### 5. Describe and interpret the following ECG.

- |                |   |
|----------------|---|
| <i>Rhythm</i>  | <i>Regular 95/min</i>   |
| <i>P waves</i> | <i>Normal morphology, all conducted</i>   |
| <i>PR</i>      | <i>Normal duration</i>  |
| <i>QRS</i>     | <i>Pacing spikes for each beat most easily seen in V2</i><br><i>Wide QRS LBBB pattern consistent with pacing from RV lead</i><br><i>Normal axis</i> |
| <i>ST</i>      | <i>In keeping with LBBB, no Sgarbossa criteria</i>  |
| <i>T waves</i> | <i>Appropriately opposite to terminal QRS in BBB</i><br><i>Except V6 – may be flipped T wave</i>  |

- *Dual chamber pacing*  
*Native atrial rate 95/min is sensed and RV lead is pacing*  
*Likely underlying AV node block*