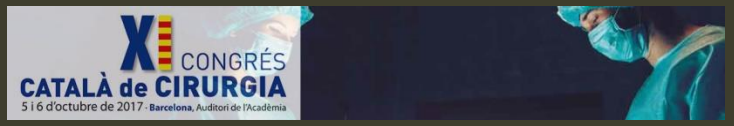
POLITRAUMA

WHERE DO WE START?



Dra. Falgueras

DECEMBER 27 TH…. CHRISTMAS

- A 30-year-old man involved in an automobile crash is brought to the emergency department.
- It is unknown if he was the driver.
- The car collided head-on with another car.
- The other passenger of the car was dead at the scene.

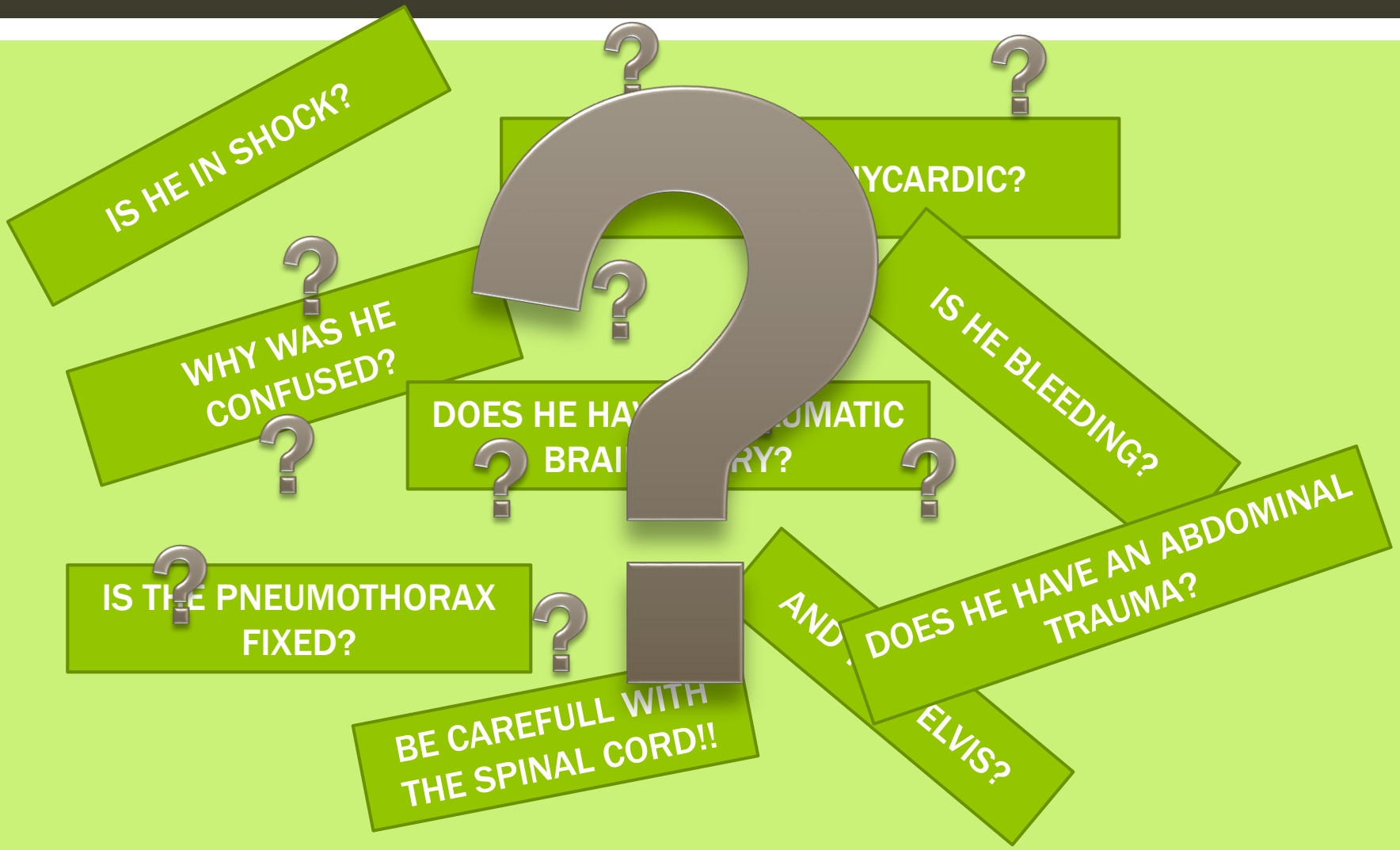
ARRIVAL OF MEDICAL AMBULANCE

- The victim gets out of the car and is confused and somewhat belligerent. He reports dyspnea and difficulty breathing.
- The medical staff diagnoses a right tension pneumothorax and inserts a needle catheter into the right second intercostal space.
- Orotracheal intubation.
- Semirigid cervical collar and immobilization on long spine board.

EMERGENCY DEPARTMENT

- OTI and assisted ventilation, SaO2 94%
- Abocath R connected to an underwater seal drainage system, 20 mL of blood is obtained
- BP 117/78 mmHg
- HR 140 beats/min
- Cool and clammy skin.

WHERE DO WE START?




B
D
A
C
E

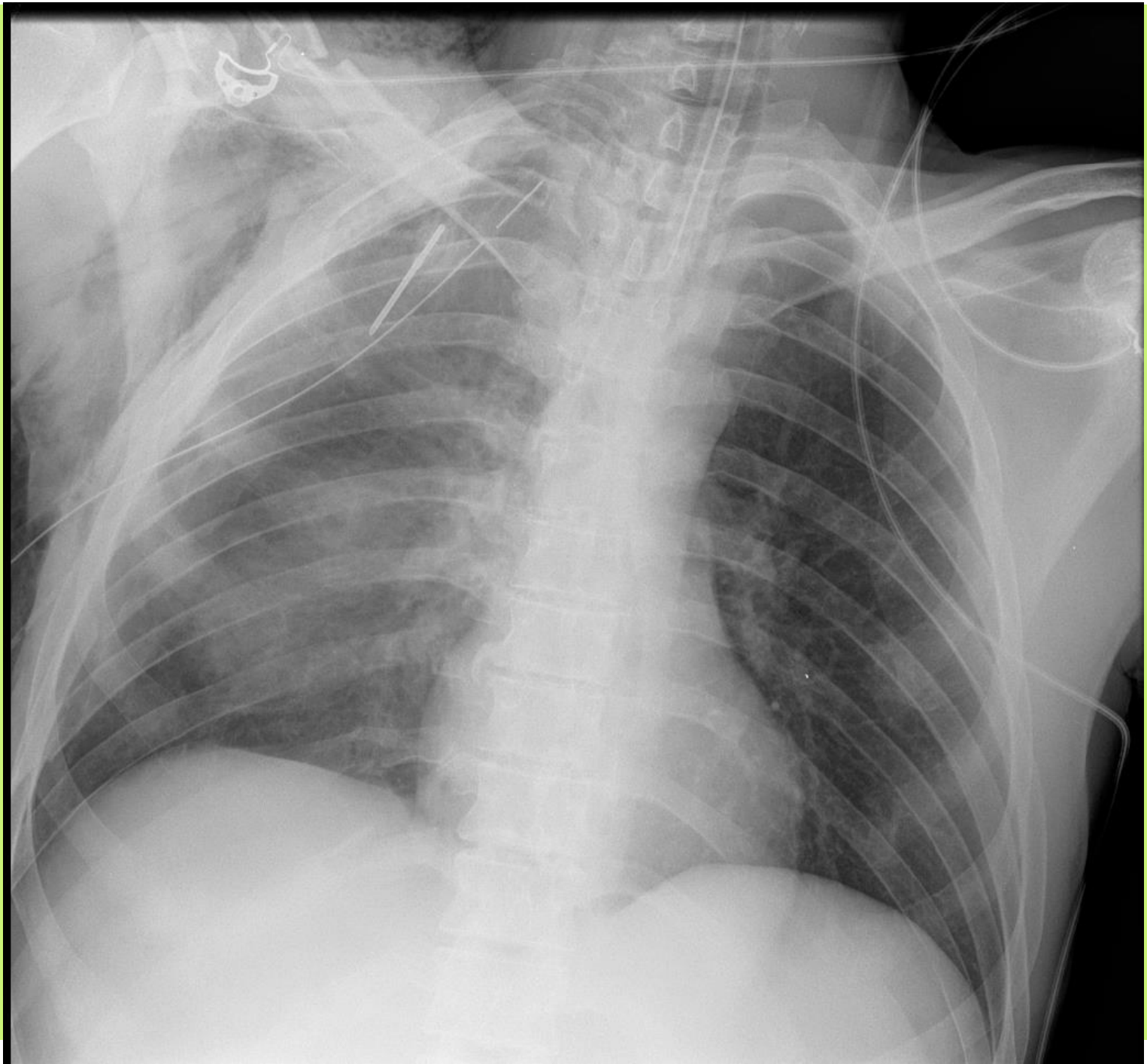
A. AIRWAY

- OTI, recheck the correct placement and function of the orotracheal tube
- SaO2 92%
- Chest X-Ray.....it's coming.....
- CERVICAL SPINE PROTECTION

B. BREATHING

- Inspection: Bruises and abrasions over the right chest wall, no paradoxical movements. The catheter inserted by the medical staff on the road has evacuated 20 mL of blood
- Palpation: subcutaneous emphysema over the right chest
- Auscultation: breath sounds are decreased on the right
- Chest X-Ray? .....it's coming.....

INSERT A RIGHT-SIDED CHEST TUBE AND CONNECT TO AN UNDERWATER SEAL DRAINAGE SYSTEM, OBTAINING 20mL OF BLOOD AND AIR LEAK



C. CIRCULATION

- He is still cold, with pale and clammy skin
- Infused 1000mL of warmed crystalloid solution
- BP 90/40
- HR 130

PATIENT WITH ABNORMAL HEMODYNAMIC NON RESPONSIVE TO THE INFUSION : NONRESPONDER

EVERY TRAUMATIC PATIENT IN SHOCK IS BLEEDING UNTIL PROVEN OTHERWISE

WHERE IS THE BLOOD??

C

- Initiated 2 large-caliber IVs , infusions of warmed crystalloid solution and blood
- We need to look for the source of bleeding:

Thorax?

Abdomen?

Pelvis?

Long bones?

External hemorrhage?

WHICH EXAMINATIONS SHOULD WE CONDUCT?
BODY-CT?
FAST?
ARTERIOGRAPHY?

DO WE GO TO THE OPERATING ROOM WITHOUT CONDUCTING ANY OTHER EXAMINATIONS?

C

- **FAST:**

Intraperitoneal fluid is demonstrated on all views,

STABLE PELVIS
NO EVIDENCE OF FRACTURES OF LOWER EXTREMITIES, NO DEFORMITIES, NO WOUNDS, NO EXTERNAL BLEEDING

Oh.....but the CT gives us more information.....don't you think that now he is more stable? It takes just a moment.....

OPERATING ROOM

- HEMOPERITONEUM 1.5 LITRES
- SPLENIC LACERATION WITH ACTIVE BLEEDING (SPLENECTOMY)
- PERFORATION OF GASTRIC FUNDUS (SUTURE)
- RETROPERITONEAL HEMATOMA OF PELVIC PREDOMINANCE WHICH DOES NOT INCREASE DURING THE SURGERY

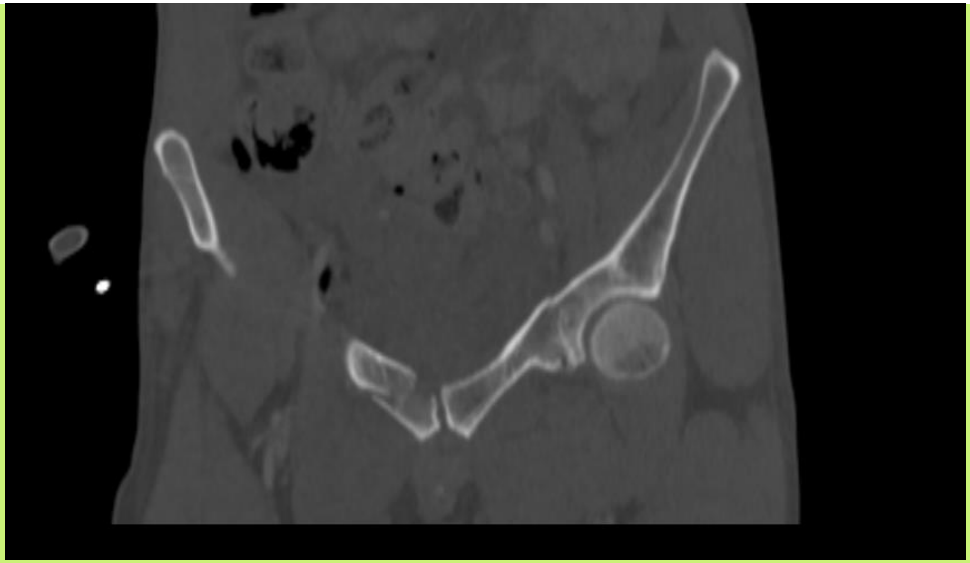
PERSISTENCE OF THE HEMODYNAMIC INSTABILITY AT THE END OF THE SURGERY:

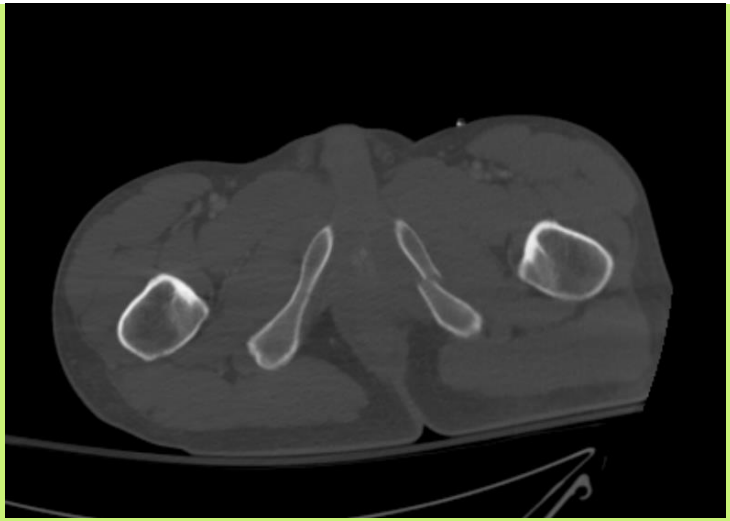
AFTER THE TRANSFUSION OF 5 UNITS OF BLOOD + 1000 mL of WARMED CRYSTALLOID , THE INFUSION OF NA at 10 mL/h IS NEEDED TO REACH A BP 110/30 AND HR 120beats/min

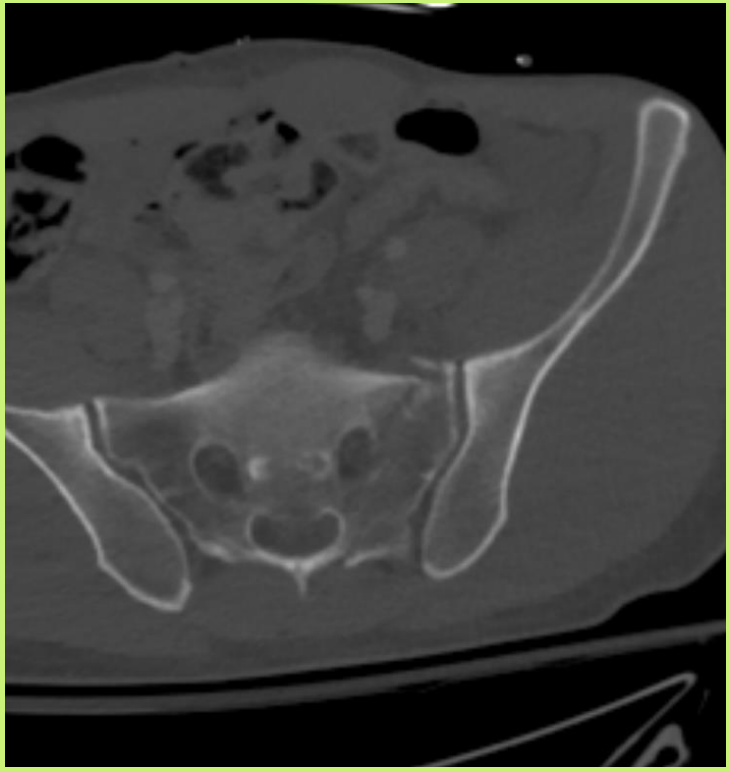
WHAT'S GOING ON?

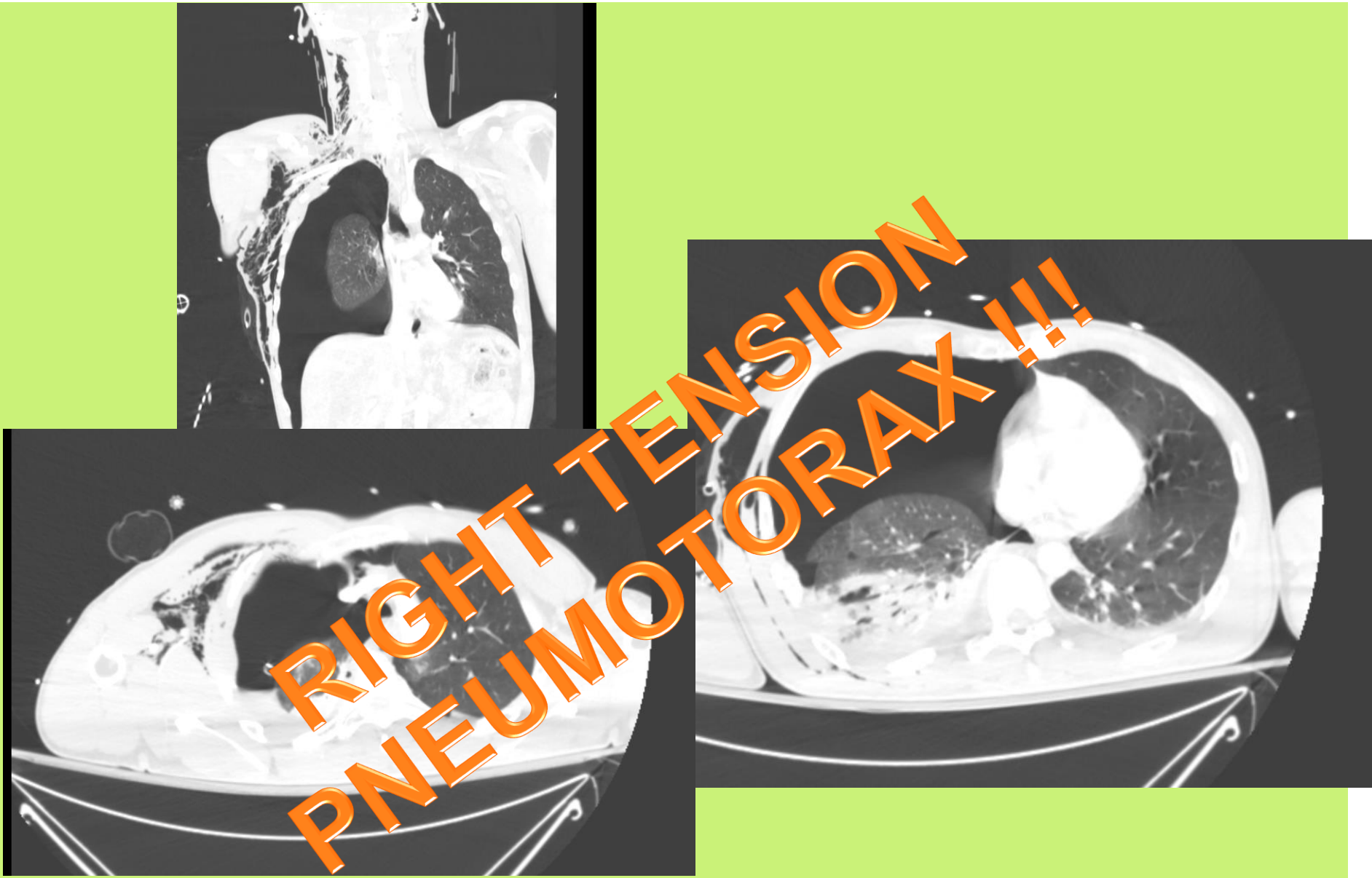
IS HE STILL BLEEDING???
WHERE?????

Now we have to go to the CT.....









Replacement of the chest drain, followed by connection to an underwater seal device reveals a great air leak (patient under assisted ventilation)

CLINICAL EVOLUTION IN ICU

- Arteriography does not show active bleeding. No embolization.
- Initial hemodynamic instability that improves with the ventilatory support and the fluid therapy
- Air leak through the chest drain which progressively improves until it is removed
- The musculoskeletal injuries are treated conservatively no need of pelvic stabilization

CONCLUSIONS

- It is vital to follow the order of the ATLS model (ABCDE) while working on the trauma patient.
- No less important is always keep in mind the REEVALUATION of the patient.
- We have to be obsessive with chest drains.
- It is not always easy to identify the bleeding point.
- The actions must always be conditioned to the patient's hemodynamic status.

Moltes gràcies !