

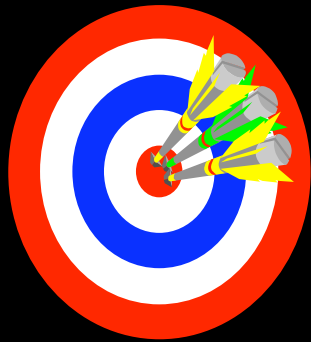
Surgical procedures by non surgeons in HEMS – how to secure quality of care and patient safety?

Scandinavian Update, Stavanger Norway,
25th May 2007

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Medical Director London Air Ambulance

Aims of talk :



- Consider why we may need quality assurance measures at all
- Draw out some principles to apply to all procedures
- Review in context of some examples

Why do procedures need QA processes at all?

Why aren't they just perfect?!

A photograph of an emergency scene at dusk or dawn. A fire truck is visible in the background with its lights on. In the foreground, several emergency responders in high-visibility yellow and orange gear are gathered around a damaged vehicle. The scene is busy and chaotic.

“Your not going to survive a crash like that”

“It was so disorganised you couldn’t do anything”

“It was so noisy we couldn’t communicate”

“After all it was an emergency you can’t expect to get it right in those situations”

“You did your best!!!”

The team had a culture that:

Believed it was ok to get it wrong in emergency situations

why.....because it was an emergency!

Relieved itself the burden of under performance

Human Performance

The Disease

Interventions

System



Character

Experience

Environment



Emotional Trauma assaults:

- Your eyes
- Your ears
- Your nose
- Your sense of touch
- Your sense of taste

Its emotional: for the patient and the carers

01-OCT-1996
IMAGE 66

R

SPI 35
TP -512.5

SL10.0/15.0

TI 0.75

kV 120

mA 240

GT 0.0

347 5/-34

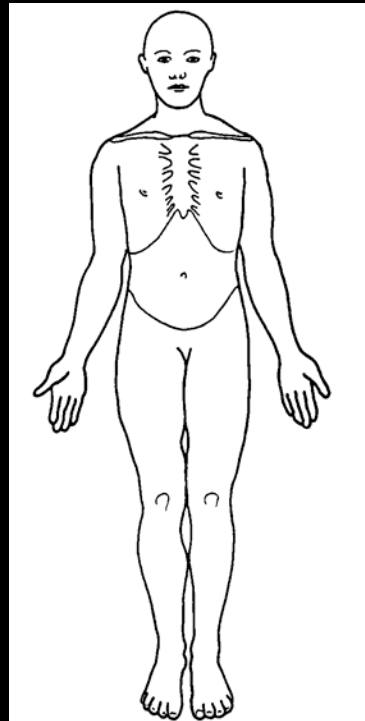
Time critical



Multiple often competing injuries

Head Injury

Cord Injury

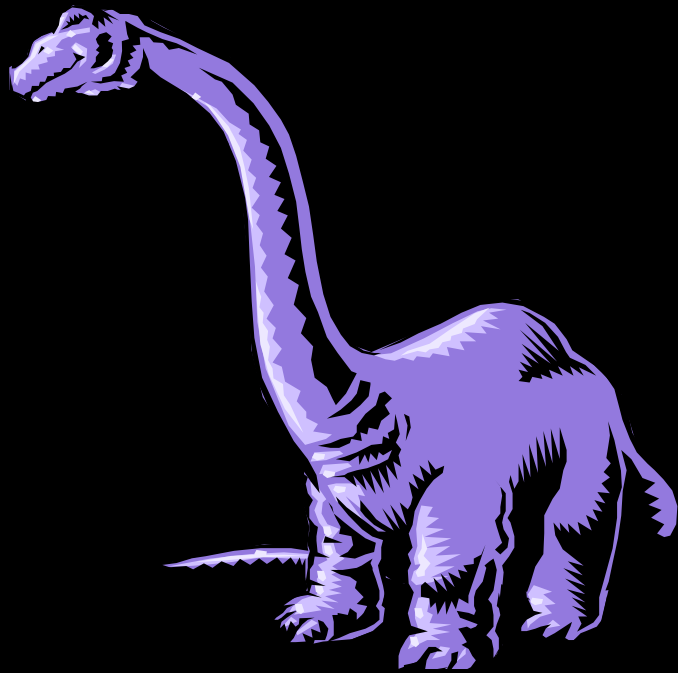


Ruptured Spleen

Ruptured liver

Pelvic Fracture

It's rare

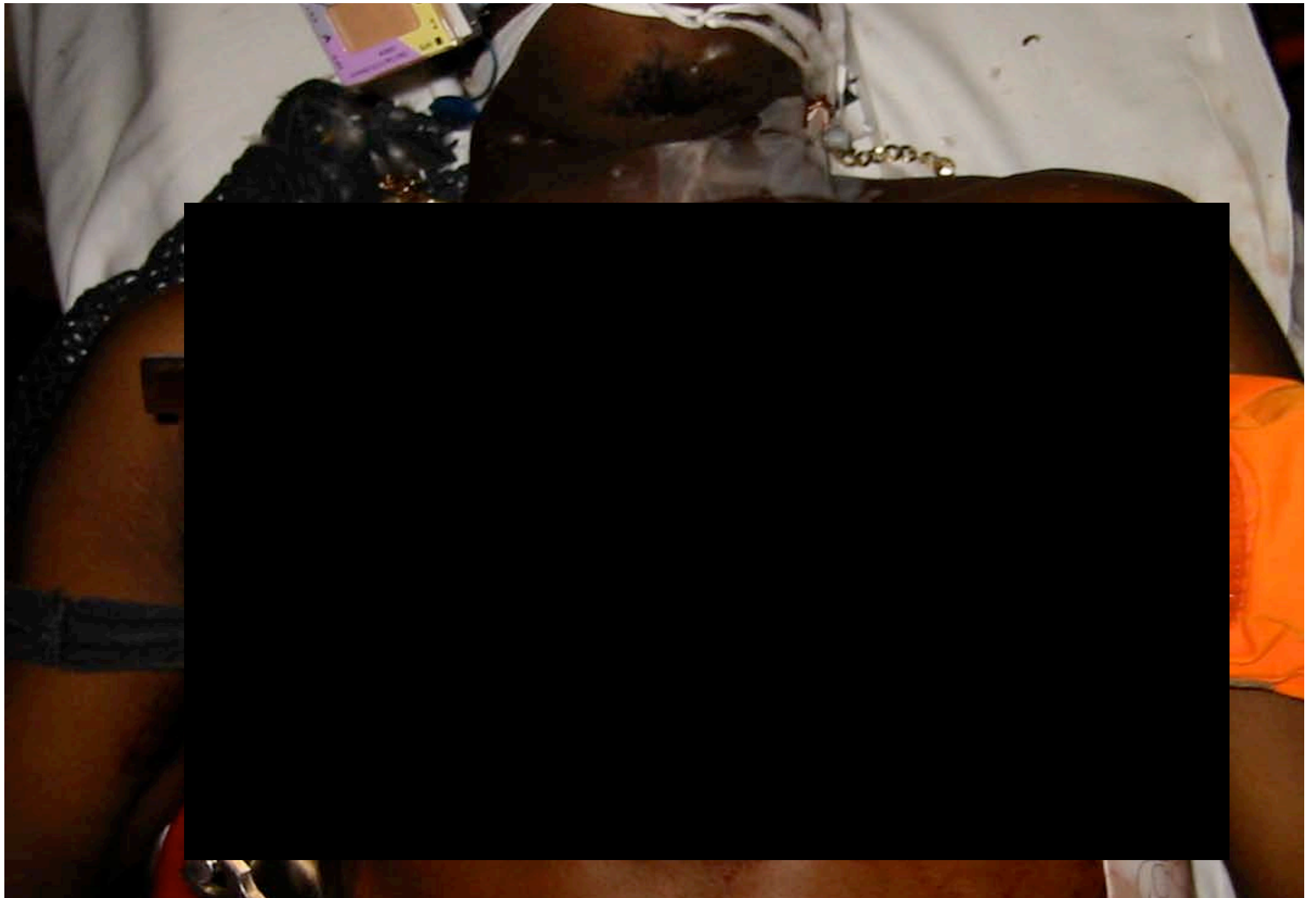


- 2 years per ambulance
- 3 weeks per small hospital
- ? for an individual doc

Interventions Complex

Drug Assisted Intubation (DAI)





Ferrari F1



Ferrari F1



Environment

- Raining
- Too cold
- Too hot
- Too sunny
- Too many people
- Too cramped

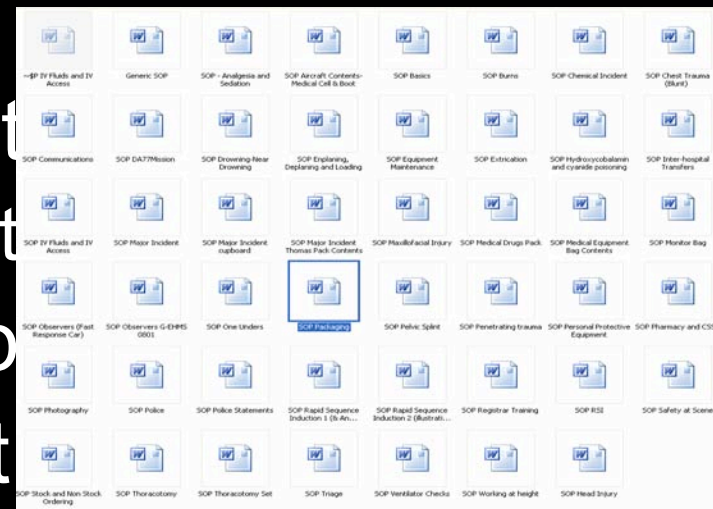
So.....

- Its emotional
- It is time critical
- It is complex
- The interventions are complex
- It is a multidisciplinary solution
- Environment always against us

So what can you do?

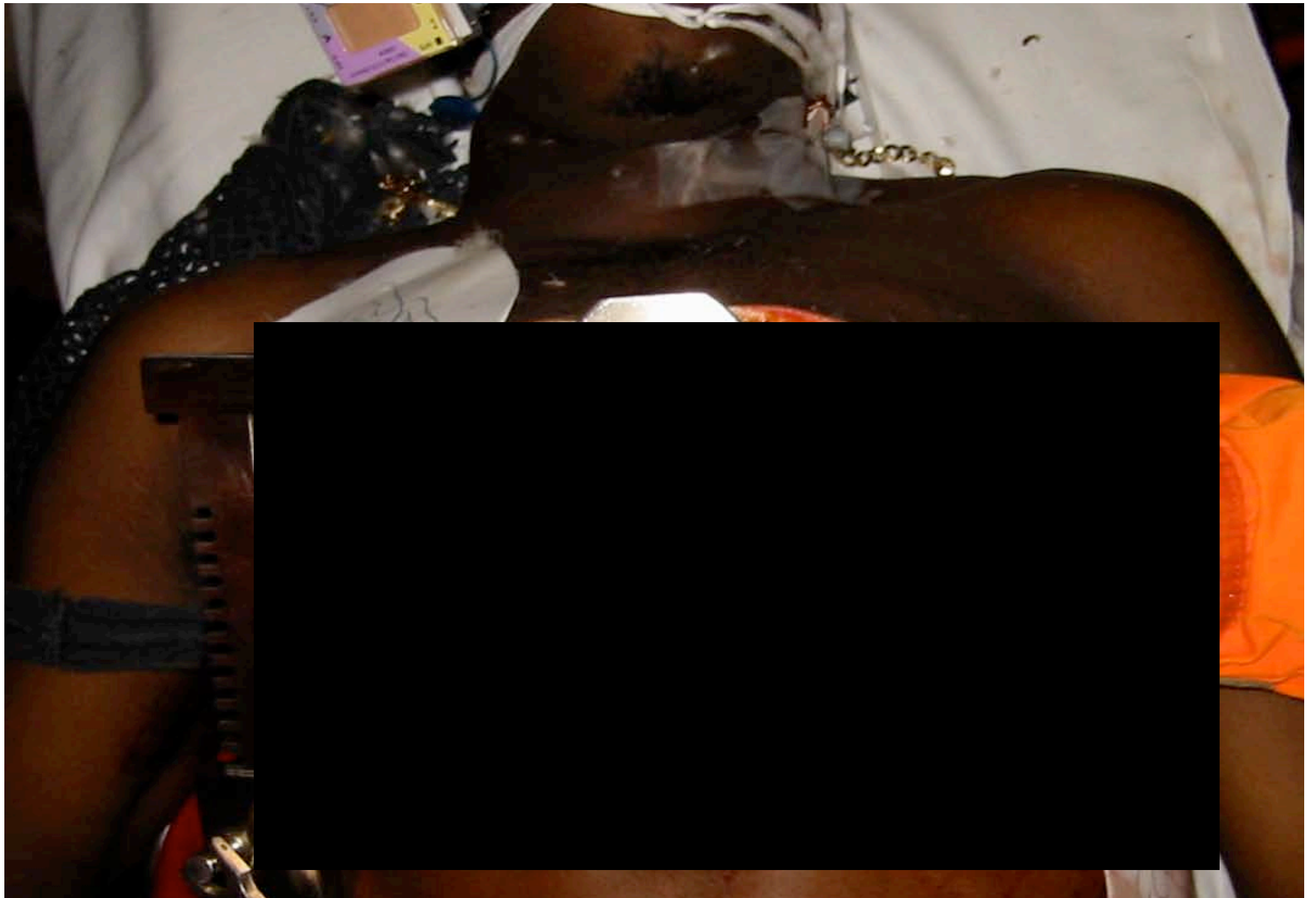
Big picture view

- Training
 - Make it multiprofessional & repeat
- SOP's
 - Cut out the debate
- Make the environment
 - Move the patient, don't
- Choose the right people
- Human factors look at

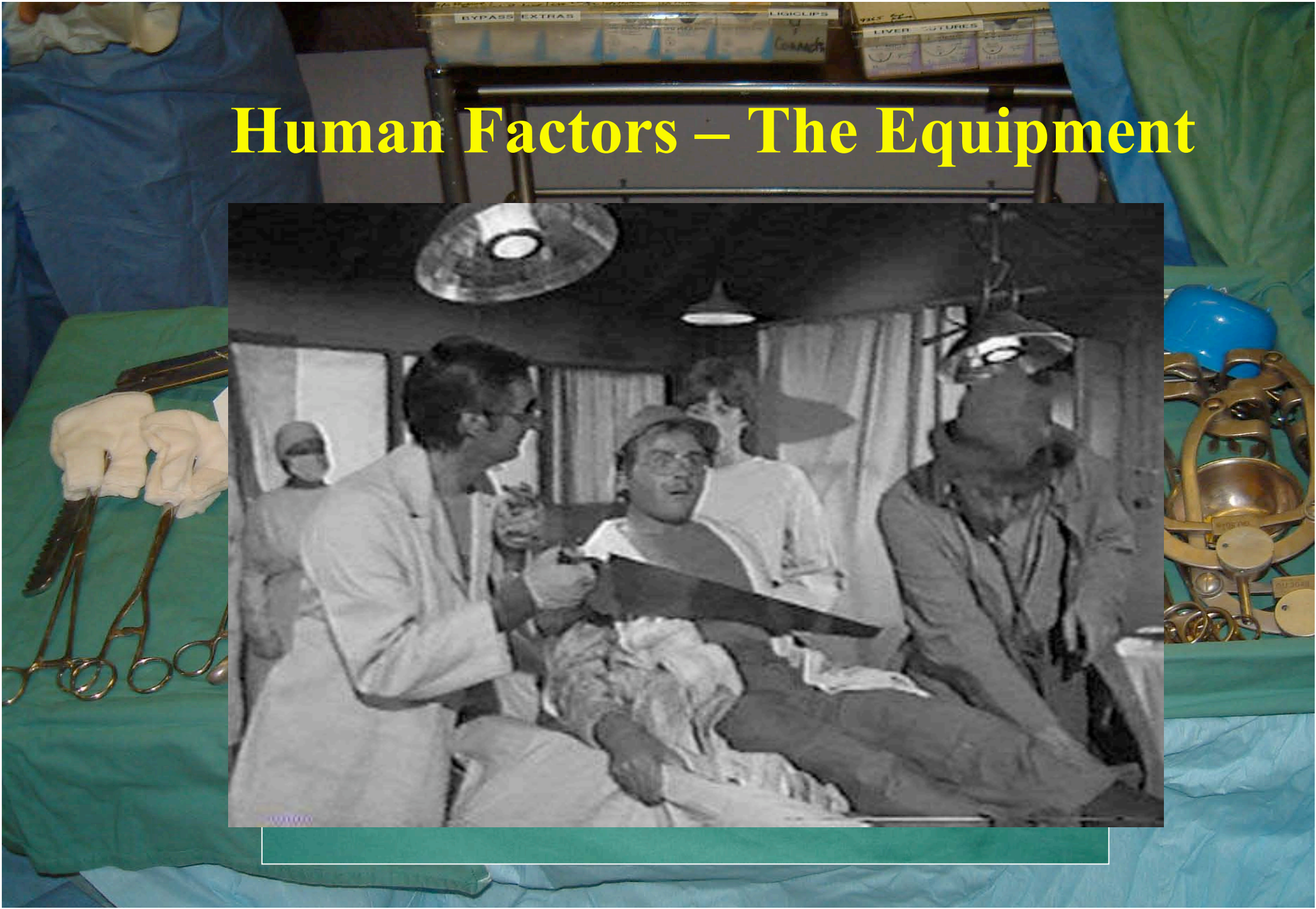
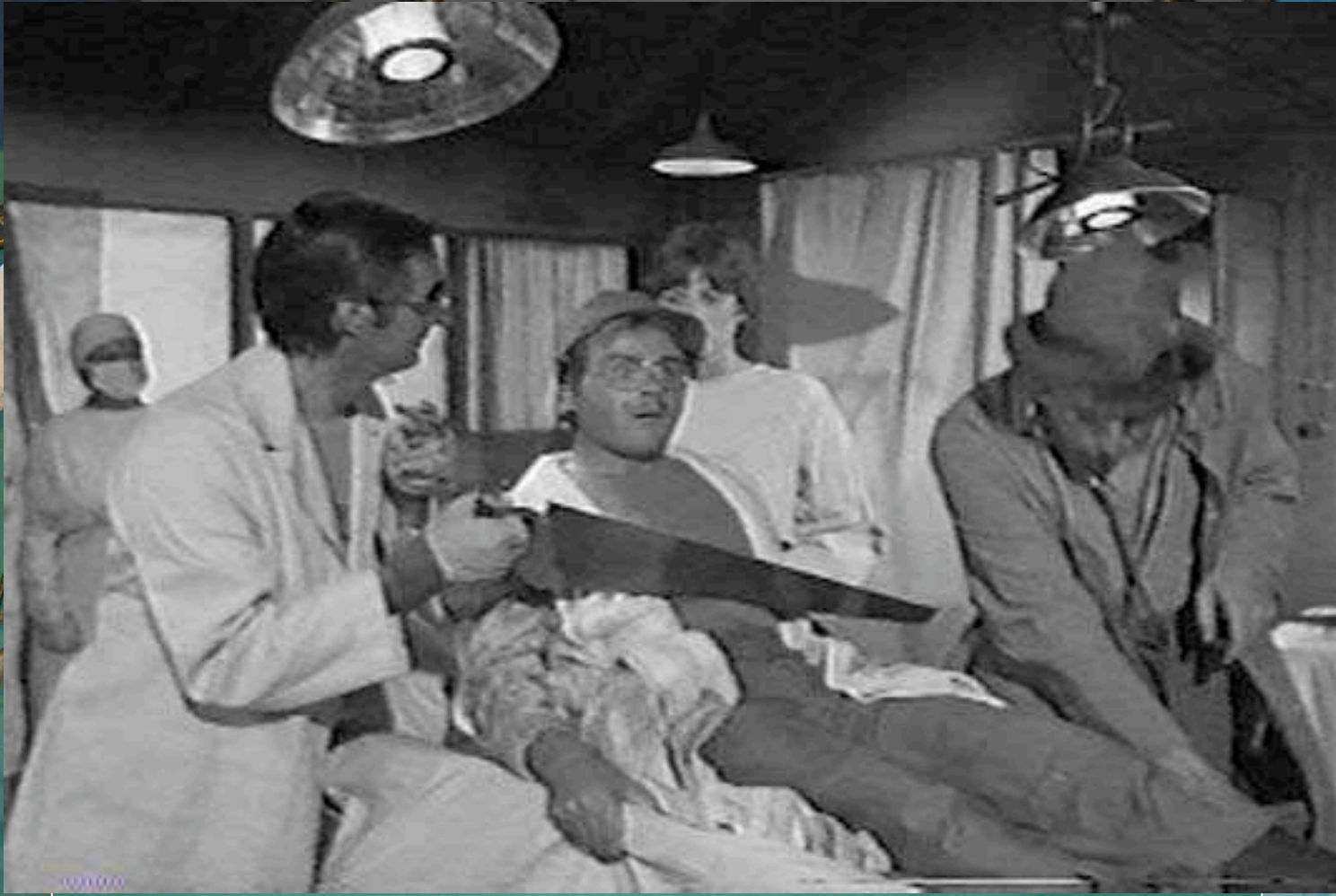


**Change in approach:
Maximise your first attempt
No escalation**

Review your equipment

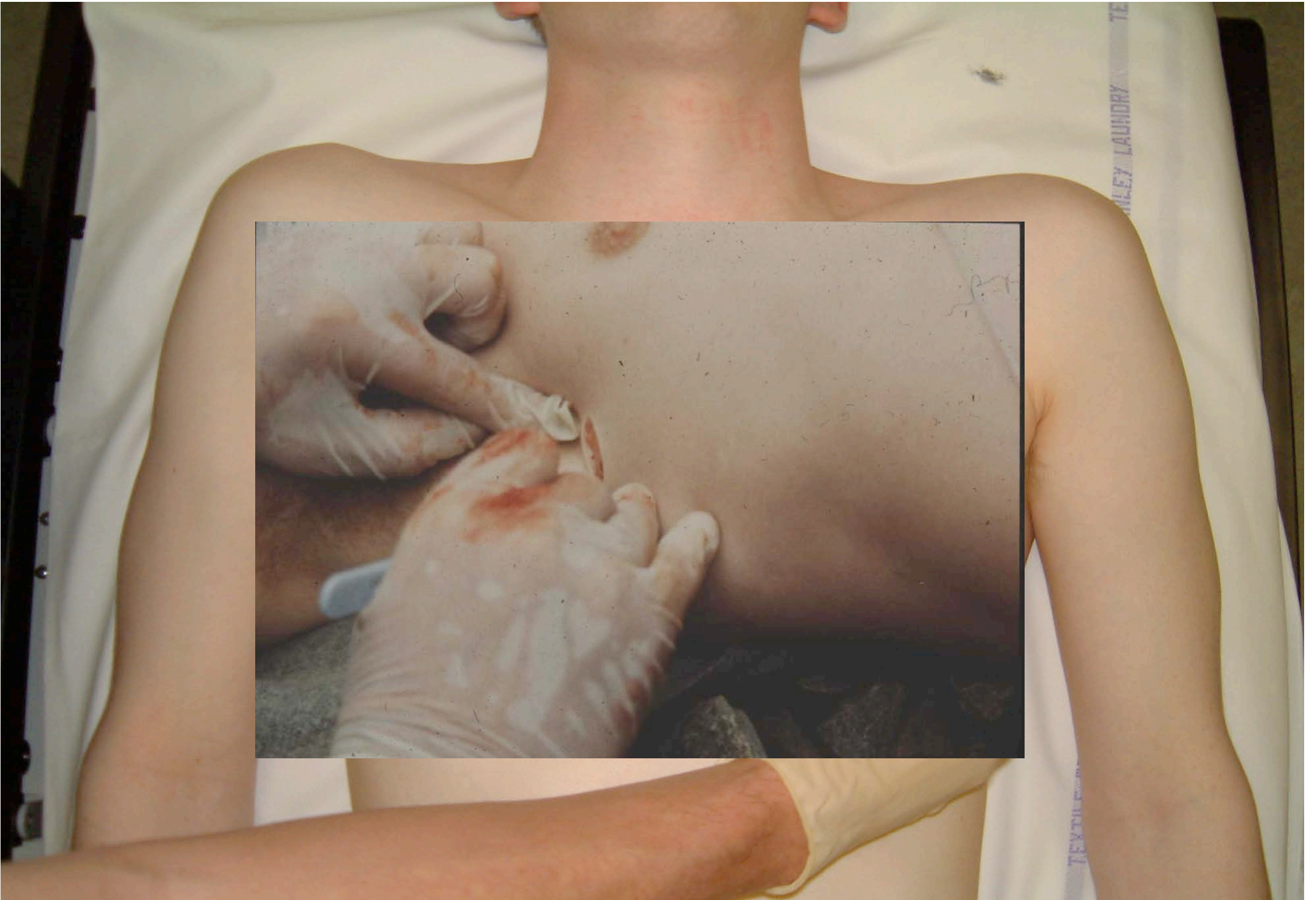


Human Factors – The Equipment



Review your approach









Stab & rock
Don't incise





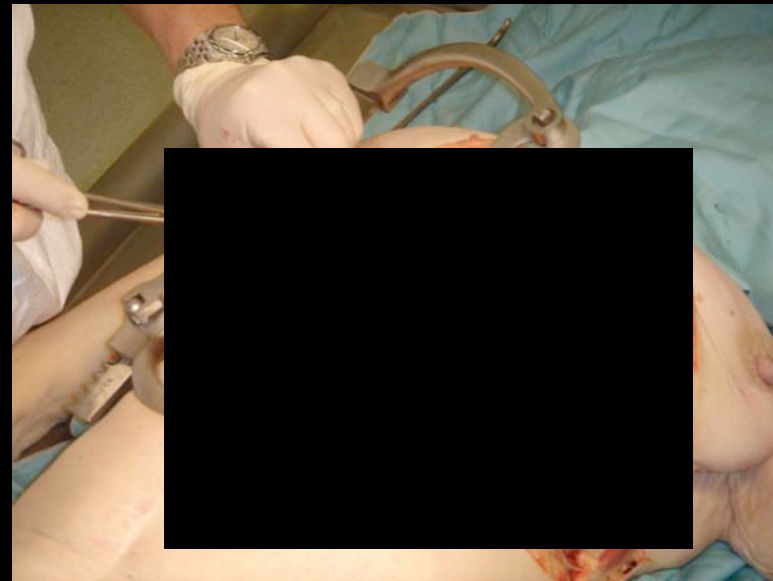
Manage Expectation

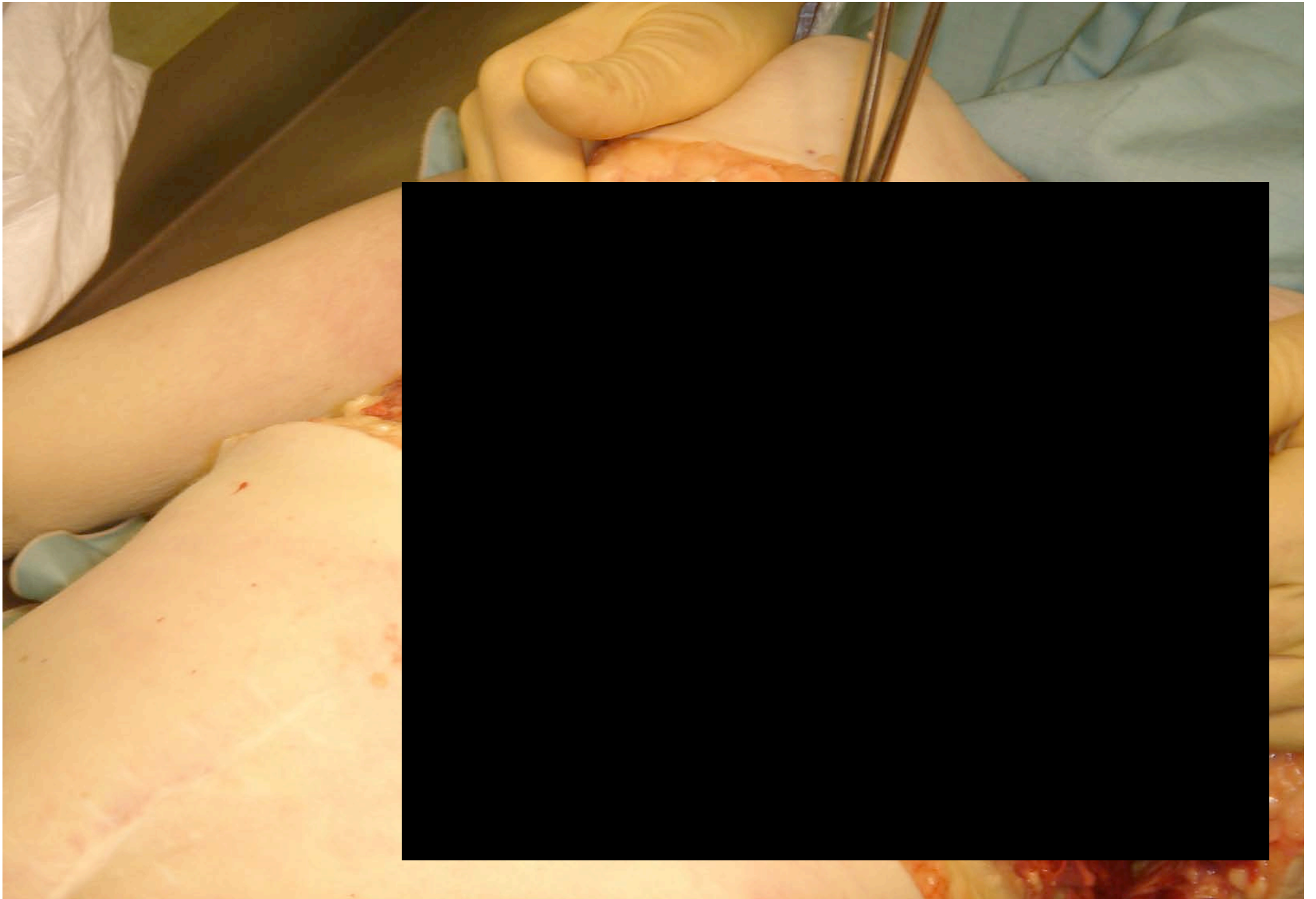
- Clear objectives

- Time frames
- Appearance
- Complications

- Realistic goals

- Biventricular wounds, heart in half
- Phrenic nerve





Training & Exercising



Attention to detail



- Anatomical land marks
- Positioning of the arm
- Movement of the breast
- Pinning the flail segment
- Single track
- ICM strip with Spencer Wells

Amputation



- Equipment
- Clinical support
 - Don't have to be alone
 - Share the decisions
 - Call a friend

Human Factors Approach To Procedures

- Philosophical approach
 - Maximise your first attempt. No escalation.
- Look at the operator & the situation
- Look at equipment
- Look at expectation
- Look at the technical steps
- Look at clinical support
- Train & exercise, train & exercise, train &

Thank You

