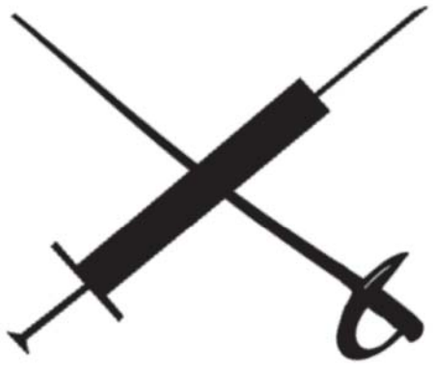
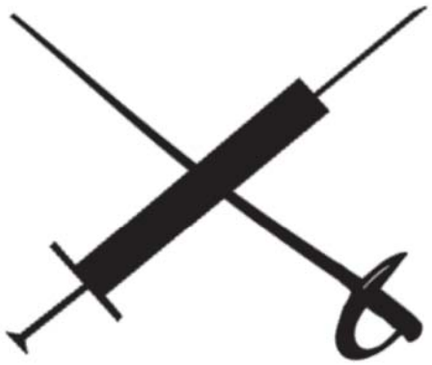
Serratus anterior plane block in addition to protocolised care bundles for patients with rib fractures in the Emergency Department - a randomised control study.



the SABRE study



Dr CHRISTOPHER PARTYKA

Emergency & Prehospital Physician

Liverpool Hospital & NSW Ambulance

NSW GOVERNMENT | AGENCY FOR CLINICAL INNOVATION

funded by ITIM NSW

Trauma System Research Grant

Clinical Trials Network

Endorsement

Serratus anterior plane block in addition to protocolised care bundles for patients with rib fractures in the Emergency Department - a randomised control study.

C PARTYKA, M BERRY, I FERGUSON, S ASHA, B BURNS, K TSACALOS, D GAETANI, G LUSCOMBE and K CURTIS

on behalf of the Australasian College for Emergency Medicine Clinical Trials Network (ACEM CTN)

PAIN

ATELECTASIS

PNEUMONIA

RESPIRATORY FAILURE

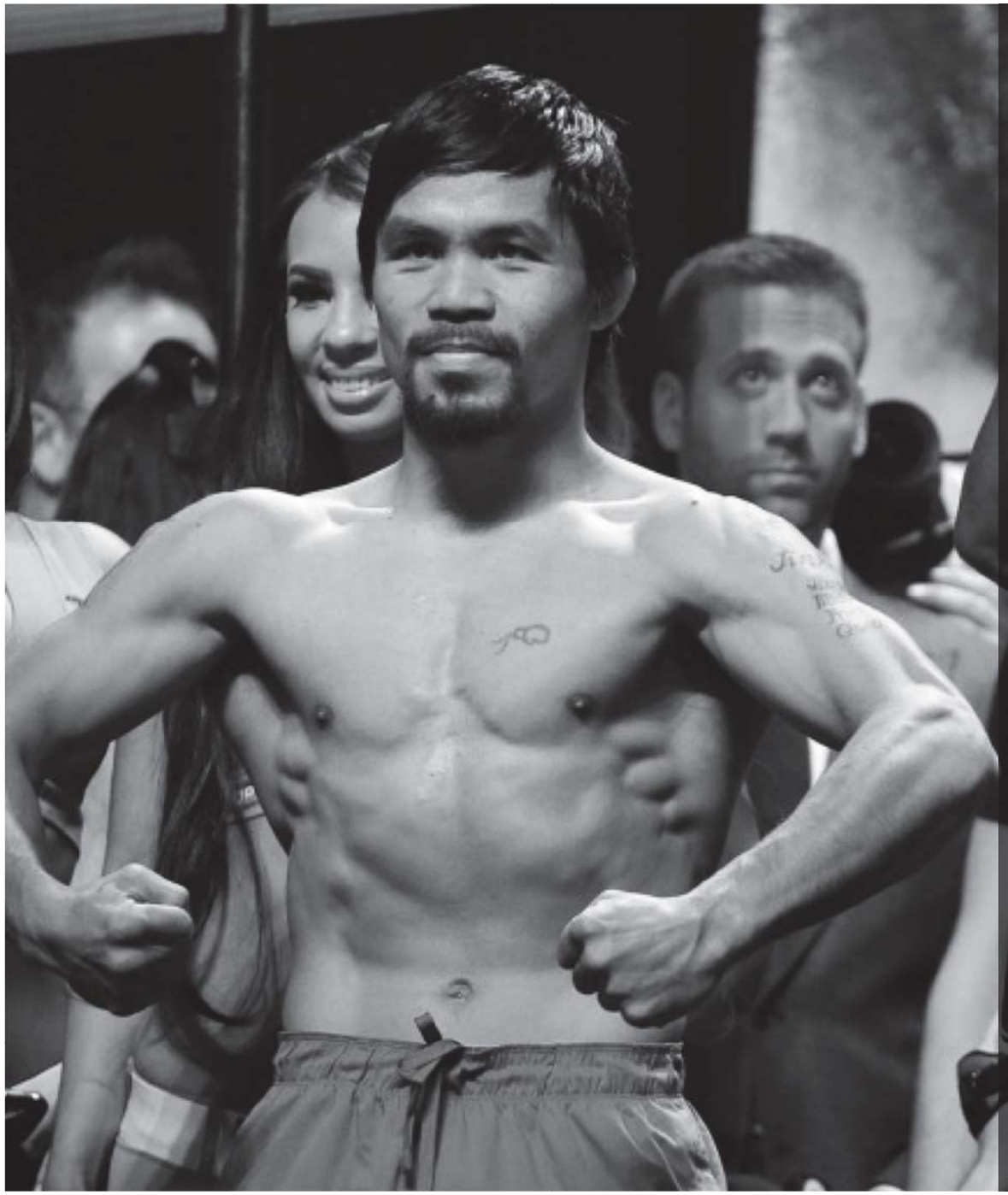
PAIN

ATELECTASIS

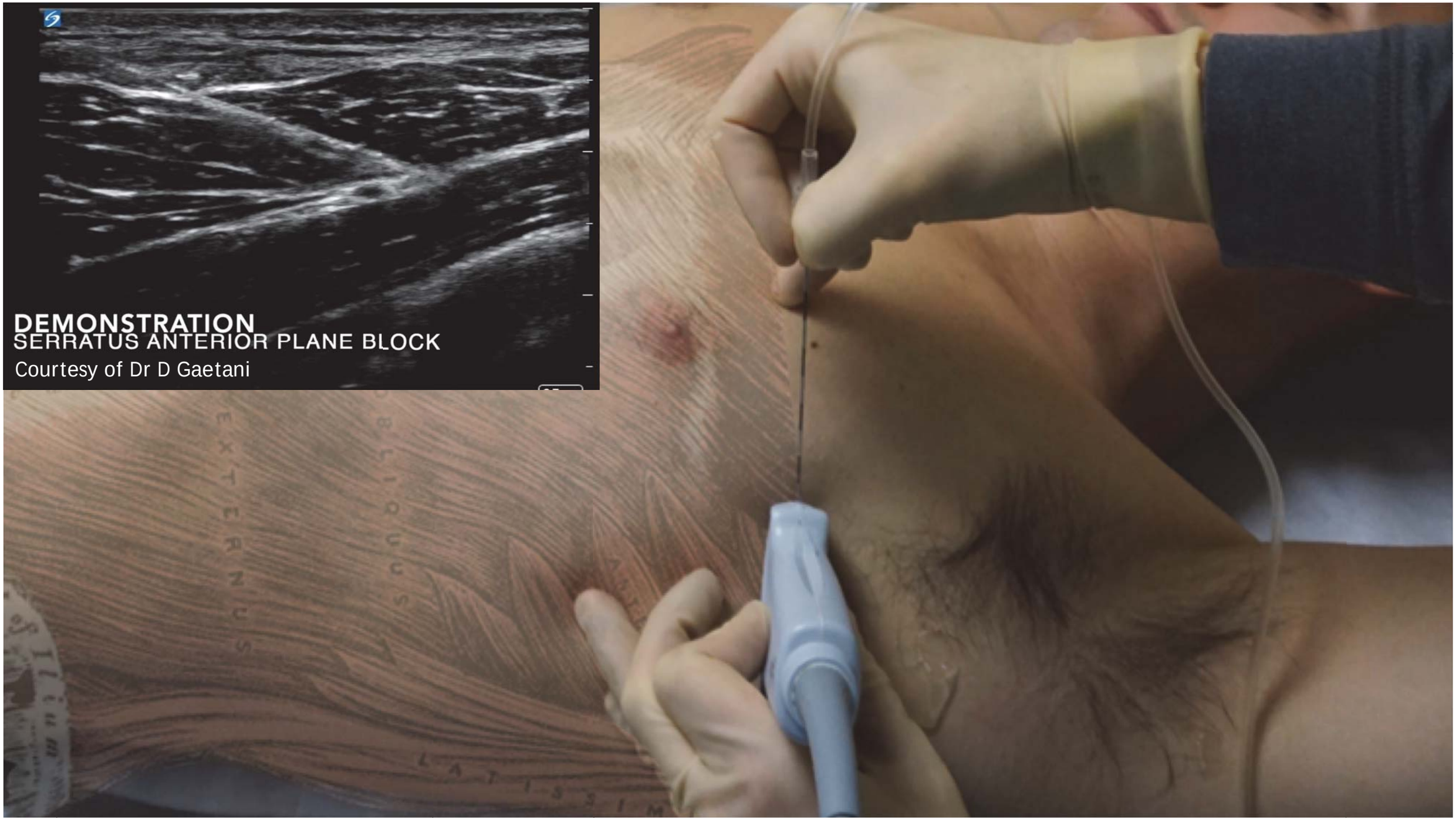
PNEUMONIA

RESPIRATORY FAILURE

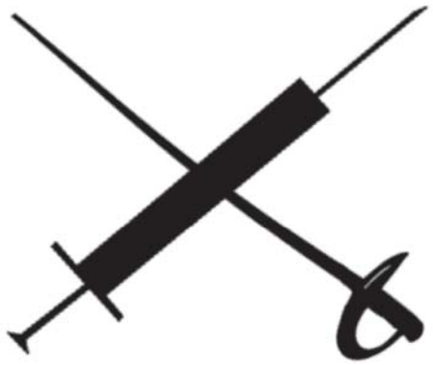
+ COMPLICATIONS OF TREATMENT
Incl. delirium, falls, constipation



SERRATUS ANTERIOR PLANE BLOCK


DEMONSTRATION
SERRATUS ANTERIOR PLANE BLOCK
Courtesy of Dr D Gaetani

Serratus anterior plane block in addition to protocolised care bundles for patients with rib fractures in the Emergency Department - a randomised control study.



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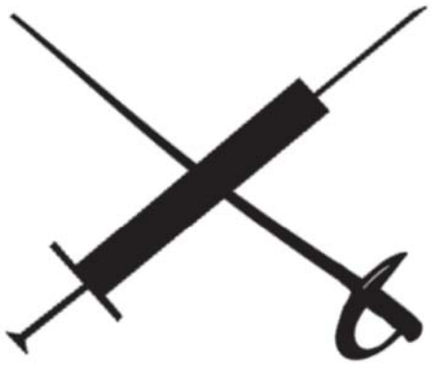

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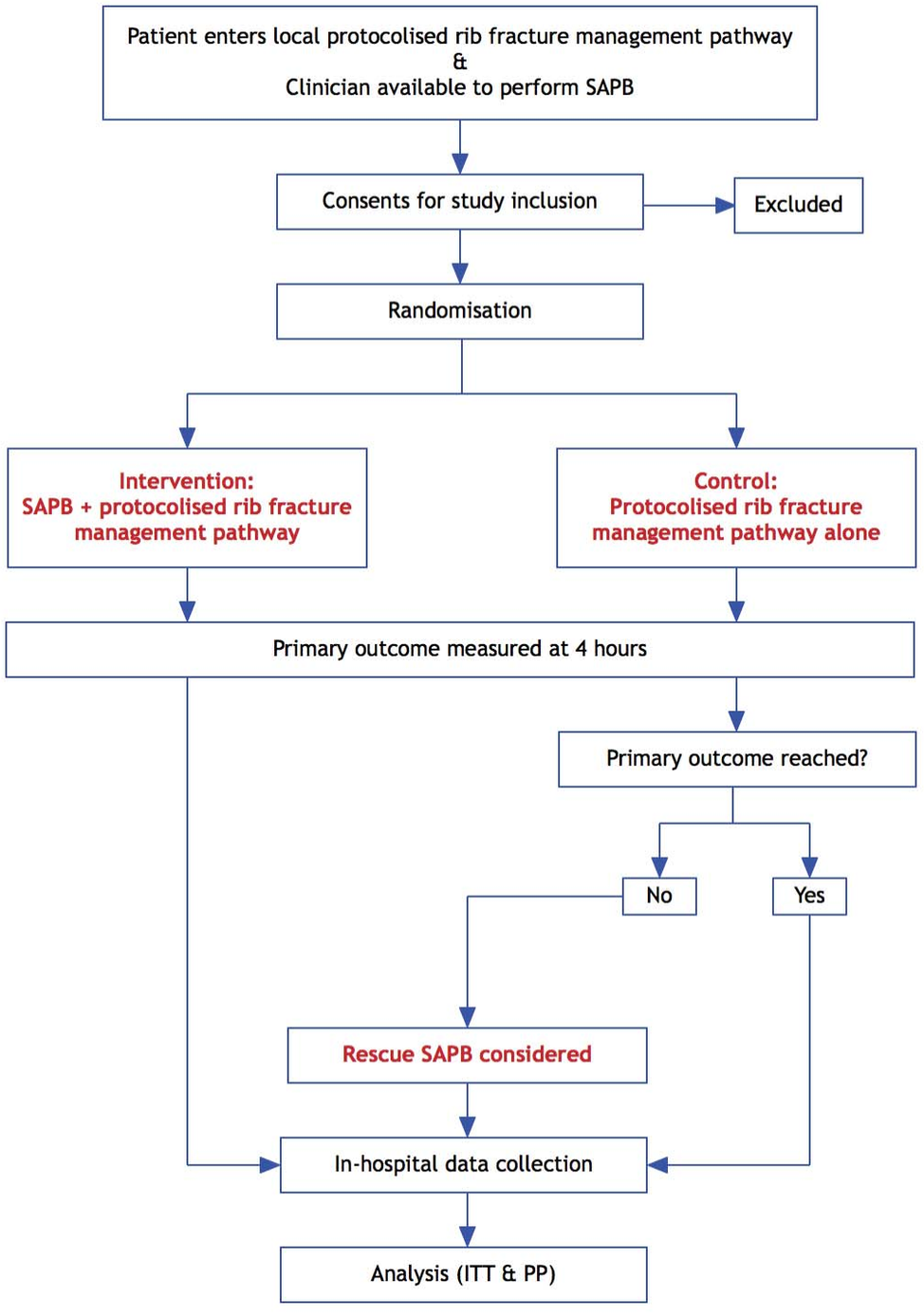
SABRE

Multi-centre, open-label pragmatic RCT

8 Emergency Departments across NSW
Tertiary & Regional trauma + urban district

Randomised (1:1) into SAPB or Control arm
Various block sizes (2,4,6)
Stratified by participating hospital

Target of 210 patients


Patient enters local protocolised rib fracture management pathway
&
Clinician available to perform SAPB
Consents for study inclusion
Excluded
Randomisation
Intervention:
SAPB + protocolised rib fracture management pathway
Control:
Protocolised rib fracture management pathway alone
Primary outcome measured at 4 hours
Primary outcome reached?
No
Yes
Rescue SAPB considered
In-hospital data collection
Analysis (ITT & PP)

WHO IS ELIGIBLE ?

INCLUSION CRITERIA.

- All patients aged ≥16 years who enter your local rib fracture/chest injury pathway and require admission
- Clinician qualified to perform SAPB is available at time of enrolment

'*Qualified clinicians*' are deemed competent to independently perform SAPBs by study investigators.

A list of local qualified clinicians will be available to you in your Department.

EXCLUSION CRITERIA.

- Intubated patients
- Prehospital SAPB
- Pregnant women
- Patients transferred for urgent surgical intervention
- Moderate-severe traumatic brain injury (GCS≤13)
- Major concomitant injury identified on imaging;
    - Femoral fracture
    - Spinal fracture
    - Pelvic fracture
    - Intra-abdominal visceral injury ± free fluid

OUTCOME MEASURES

Primary outcome.

Pain score at FOUR hours from study enrolment.

Pain scores recorded as a verbally administered numerical rating scale (score out of '10')

'0' is "no pain" and '10' is "worst pain imaginable" (or similar)

Measured at '*end inspiration following a slow, full (vital capacity) breath*'

Secondary outcomes.

- Pain scores at 12 and 24 hours
- Subsequent rates of in-hospital pneumonia
- Total opiate administration for first 24 hours of admission
- Rates of subsequent inpatient regional anaesthesia
- Complications: Pneumothorax and LAST events
- Need for non-invasive ventilation or mechanical ventilation
- ICU and Hospital length of stay
- Delirium (in patients aged ≥65 years)
- 30 day mortality
- Quality of life (at 30 days)

OUTCOME MEASURES

Primary outcome.

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Measured at '*end inspiration following a slow, full (vital capacity) breath*'

PAIN SCORE

Absolute < FOUR (/10)

&

Reduction ≥ TWO (/10)

OUTCOME MEASURES

REPORTED

ITT & PP analyses

Secondary outcomes.

- Pain scores at 12 and 24 hours
- Subsequent rates of in-hospital pneumonia
- Total opiate administration for first 24 hours of admission
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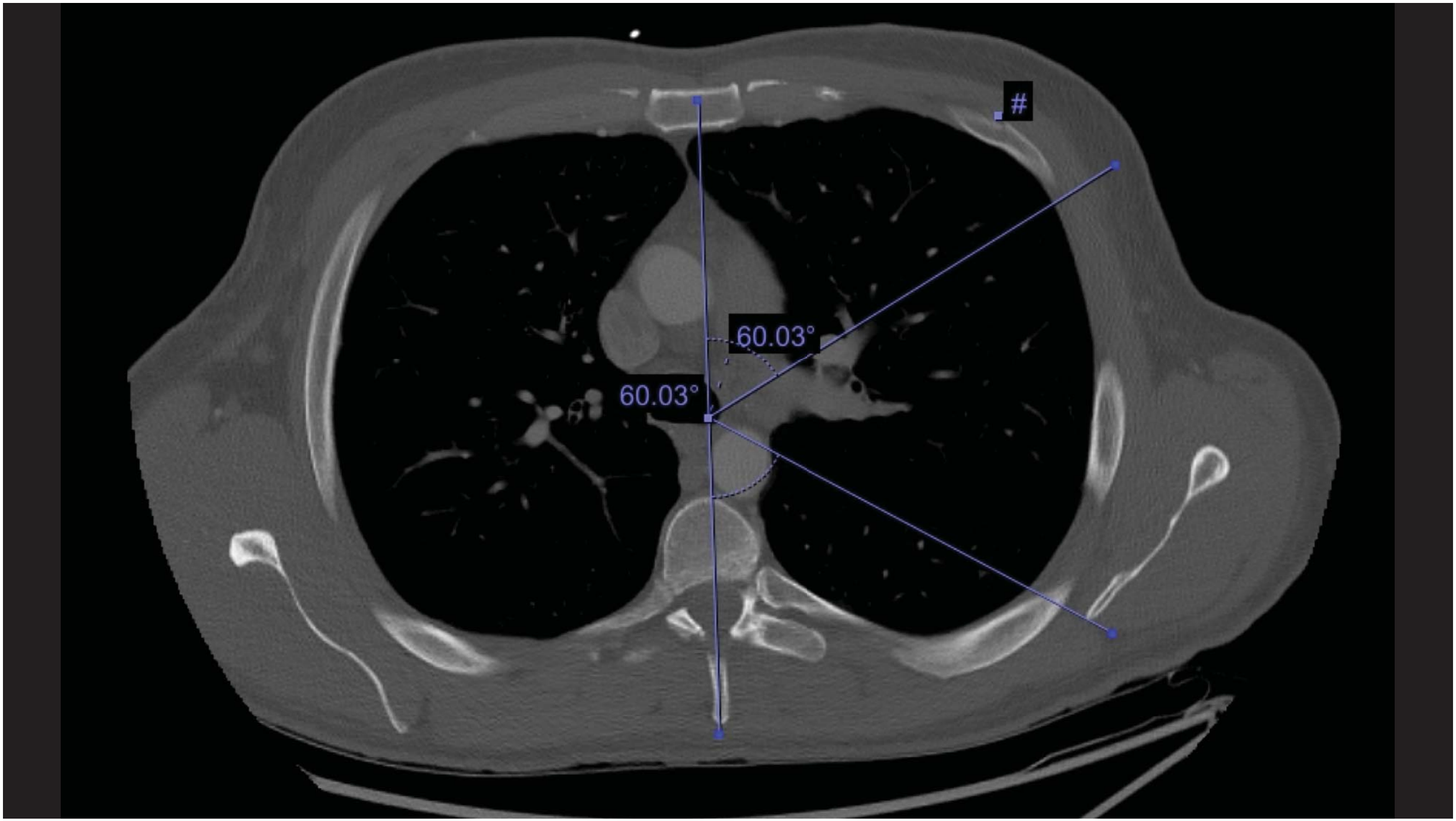
#
60.03°
60.03°

PROGRESS

Patient 1 on April 12th

Patient 95 enrolled this week

Watch this space!

Thank you…

M BERRY, I FERGUSON, S ASHA, B BURNS, K TSACALOS,
D GAETANI, G LUSCOMBE and K CURTIS

on behalf of the Australasian College for Emergency Medicine Clinical Trials Network (ACEM CTN)

As well as colleagues at the following EDs….

LIVERPOOL, ST GEORGE, NORTHERN BEACHES, ORANGE,
CAMPBELLTOWN, SUTHERLAND, WOLLONGONG & RPA

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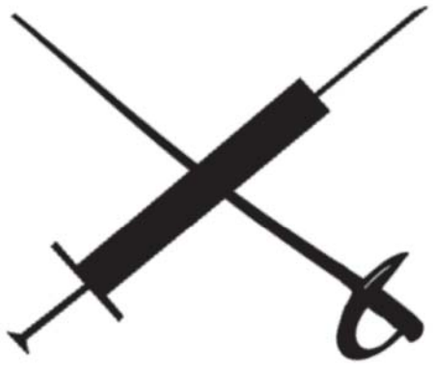

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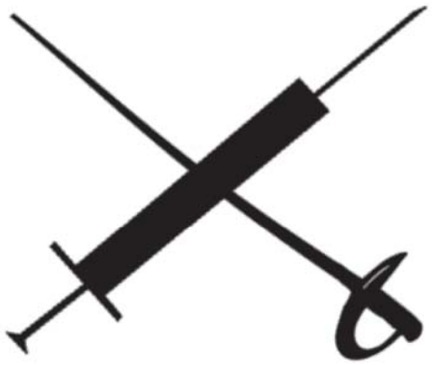

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