



# ATLS Simulation

For Intern

# CASE 1

ผู้ป่วยชาย อายุ 35 ปี ชั้บมอเตออร์ไซค์ชนรถยนต์ 30 นาทีก่อน  
รู้สึกตัวดี

Triage level - Resuscitation

# CASE 1

Maharajakhonsithammarat Hospital  
15/03/2025 01:27:38

C1-5  
\*\*\* Abdomen

MI 1.0  
TI 0.3

GE  
Venue



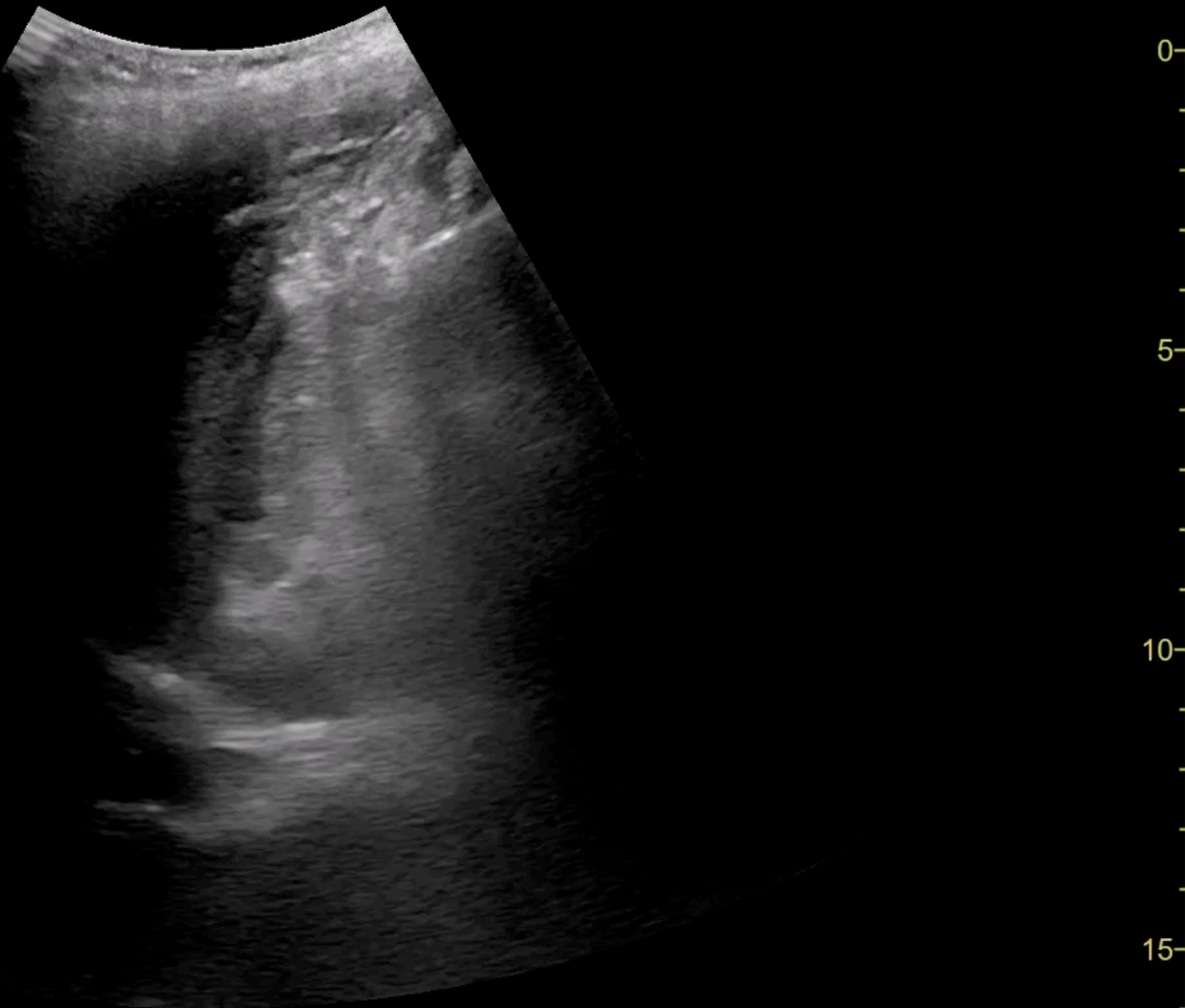
Maharajnakhonsithammarat Hospital  
15/03/2025 01:28:57

C1-5  
\*\*\* Abdomen

MI 1.0  
TI 0.3

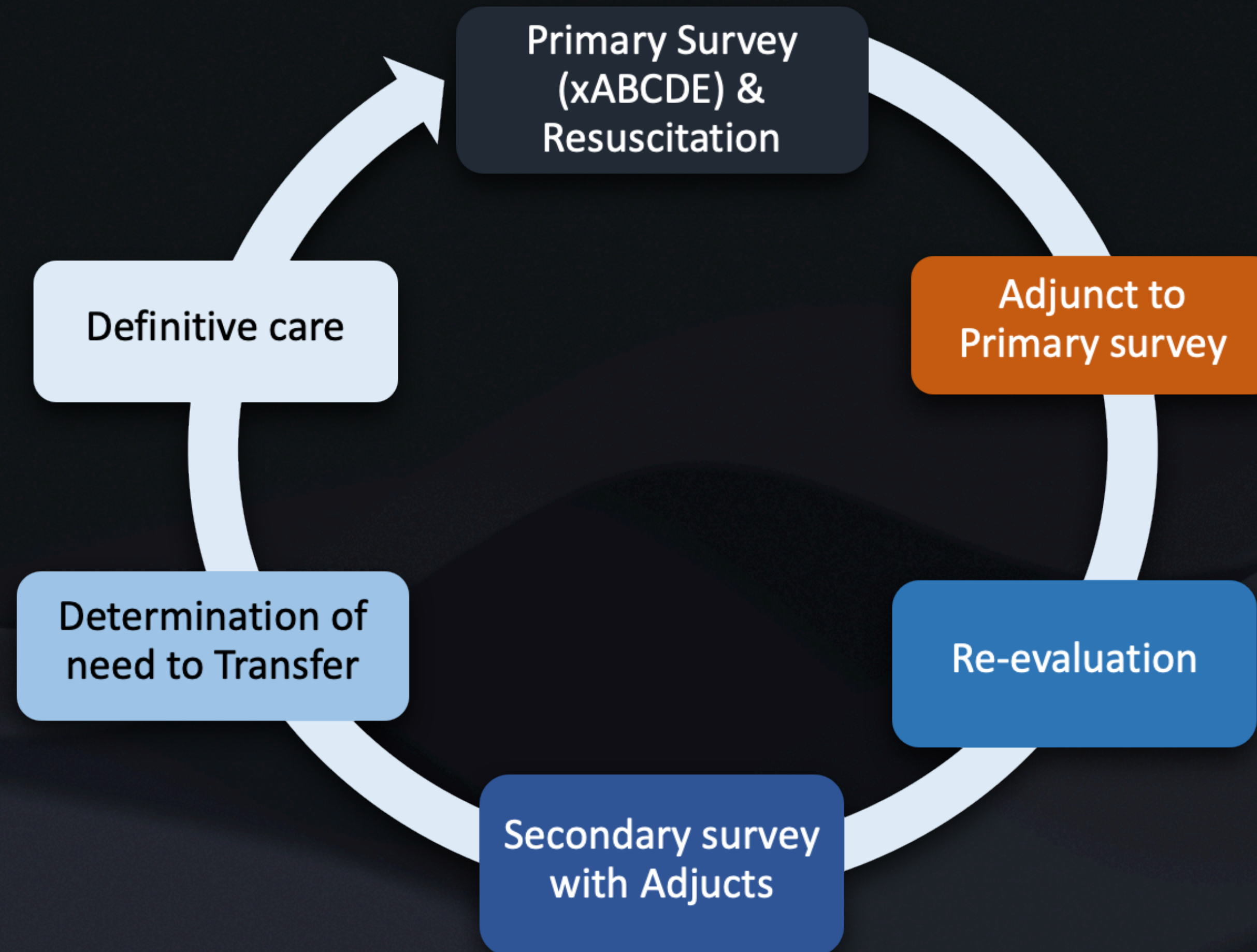
GE  
Venue

t



# Learning point

- Assessment in Trauma patients



- ECG monitoring
- SpO<sub>2</sub>, EtCO<sub>2</sub>, ABG
- **E-FAST**
- CXR, film Pelvis – **portable**
- IV /IO access
- Splint, Spinal motion restriction

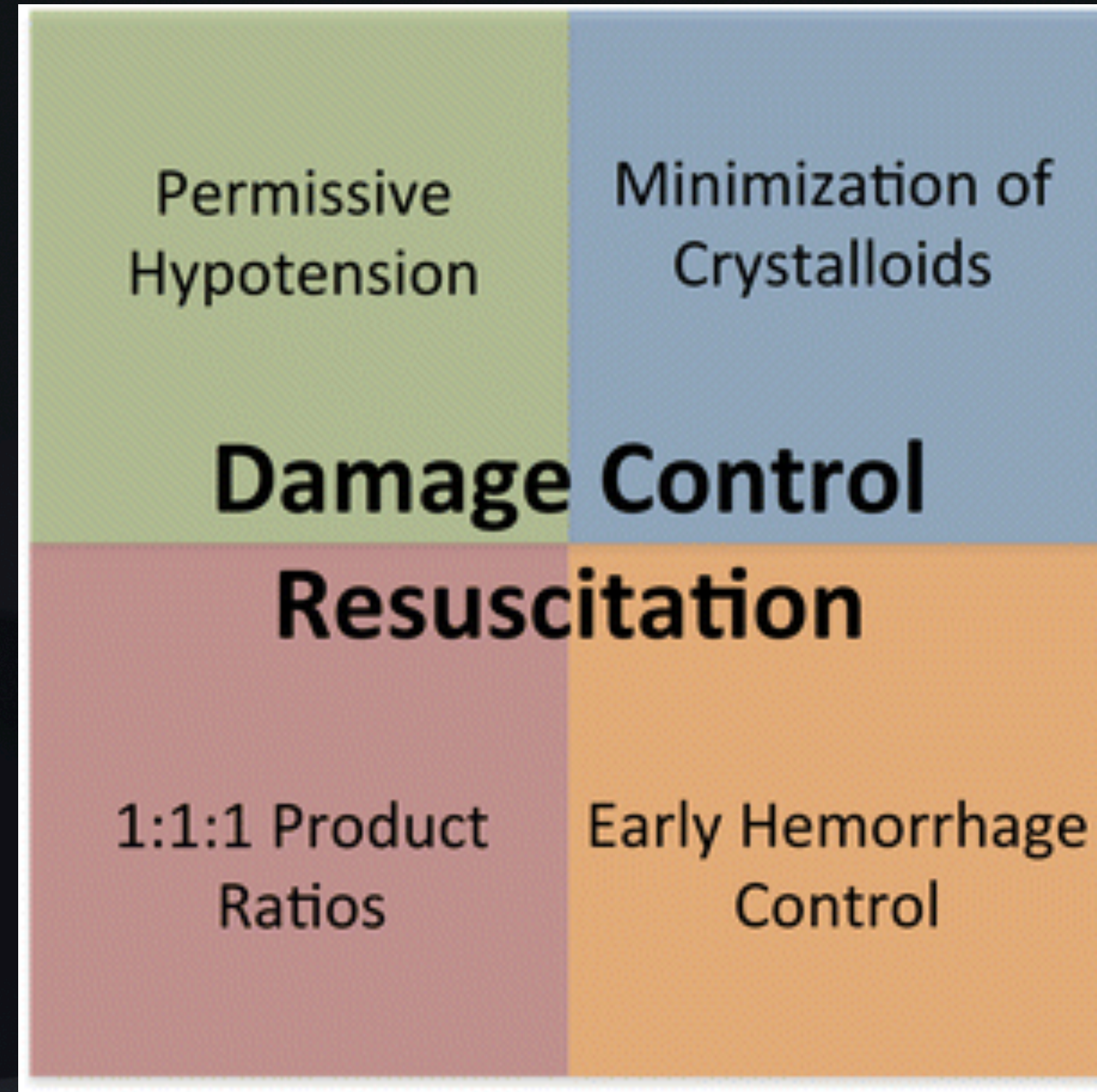
- Damage control resuscitation

Accept SBP 80-90 mmHg

Massive Transfusion protocol (MTP)

PRC 4 u, FFP 4 u, PC 6 u

activate MTP คือเอามาให้ทันที  
การันตี 20 นาที



Prefer Balanced salt solution (Acetal, LRS)





# The Lethal Diamond



Shock: decreased cellular metabolism  
Given unwarm fluids and blood components

Hypothermia

Metabolic  
acidosis

Shock: anaerobic metabolism  
and lactic acid production  
Given NSS



hypocalcemia

Lost from bleeding  
Massive transfusion  
Shock: decreased citrate metabolism

Coagulopathy

Traumatic Coagulopathy  
Lost / consumption /  
dilution / clot instability

# CASE 2

ผู้ป่วยชาย อายุ 40 ปี ชับมอเตอร์ไซด์ชนรถยนต์ 30 นาที ก่อน ไม่รู้สึกตัว

Triage level- Resuscitation

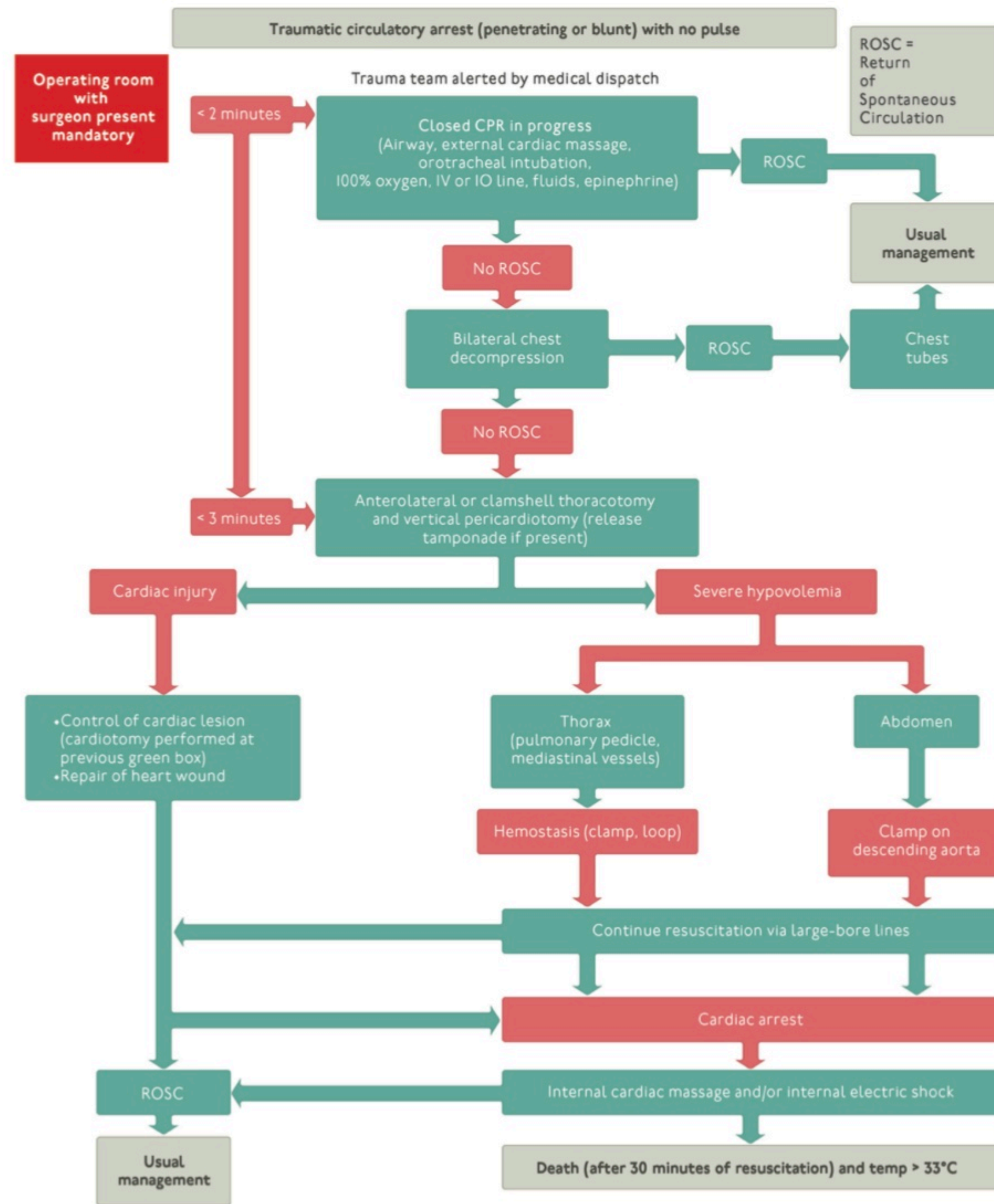
# Learning point

- Traumatic cardiac arrest

ACLS algorithm

Bilat. Chest decompression

Emergency thoracotomy



■ FIGURE 4-7 Algorithm for management of traumatic circulatory arrest. ECM = external cardiac massage; OTI = orotracheal intubation; IVL = intravenous line; IOL = intraosseous line.

# Joint Trauma System Clinical Practice Guideline

## Recommendations for Emergency Resuscitative Thoracotomy (in the Combat / Operational Environment)

Recommendation	Mechanism	Location	Condition
<b>ABSOLUTE indication</b>	Penetrating	Truncal or Extremity (especially thoracic)	(1) Loss of vitals <15 min or (2) Impending cardiac arrest
	Blunt	Truncal or Extremity	(1) Prehospital vitals and either (2) Witnessed arrest after arrival or (3) Refractory shock + impending arrest
<b>RELATIVE indication</b>	Penetrating or Blunt	Truncal or Extremity	(1) Prehospital arrest and (2) SOL on arrival
	Penetrating or Blunt	Cranial (potentially salvageable)	(1) Prehospital vitals (2) Witnessed arrest after arrival or (3) Impending arrest
<b>Should NOT be performed</b>	Blunt	-	(1) Arrest before arrival and (2) With no SOLs
	-	-	Mass casualty events

# CASE

ผู้ป่วยชาย อายุ 51 ปี ขับรถจักรยานยนต์ประสบอุบัติเหตุ 10 นาทีก่อน  
ศีรษะกระแทก สลบ จำเหตุการณ์ไม่ได้

Triage level - Emergency

# CASE 3

## Traumatic brain injury - Prevent further brain damage

- B : SpO<sub>2</sub> > 94%, PaO<sub>2</sub> 80-100 mmHg, PaCO<sub>2</sub> 35-45 mmHg
- C : SBP ≥ 100 mmHg
- D : DTX 100-180 mg%, Antiepileptic drugs
- E : BT 36-38 c

## Tranexamic acid

- In moderate to severe head injury, within 3 hours
- Dose : single 2 gm , or 1 gm over 10 mins then infusion 1 gm in 8 hours

■ Table 7-13: Hyperosmolar Agents.

Hyperosmolar Agents		
Agent	Dose	Comments
<b>Mannitol</b>	20% Solution: IV bolus, 1 g/kg (5 ml / kg) over 5–15 min  Can repeat every 4–6 hours	ICP decreases in 1–5 min with peak effect in 20–60 minutes  May aggravate hypotension through osmotic diuresis
<b>Hypertonic saline</b>	5% Solution: 2.5–5 mL/kg over 5–20 min Pediatric: 2–5 mL/kg over 10–20 min  7.5% Solution: 1.5 –2.5 mL/kg over 5–20 min  23.4% Solution: 30 ml over 10–20 min Pediatric: 0.5 mL/kg (max dose: 30 mL)	Ideally administered through a central venous catheter  In the emergent situation, administration via peripheral IV is safe  Monitor for subcutaneous infiltration

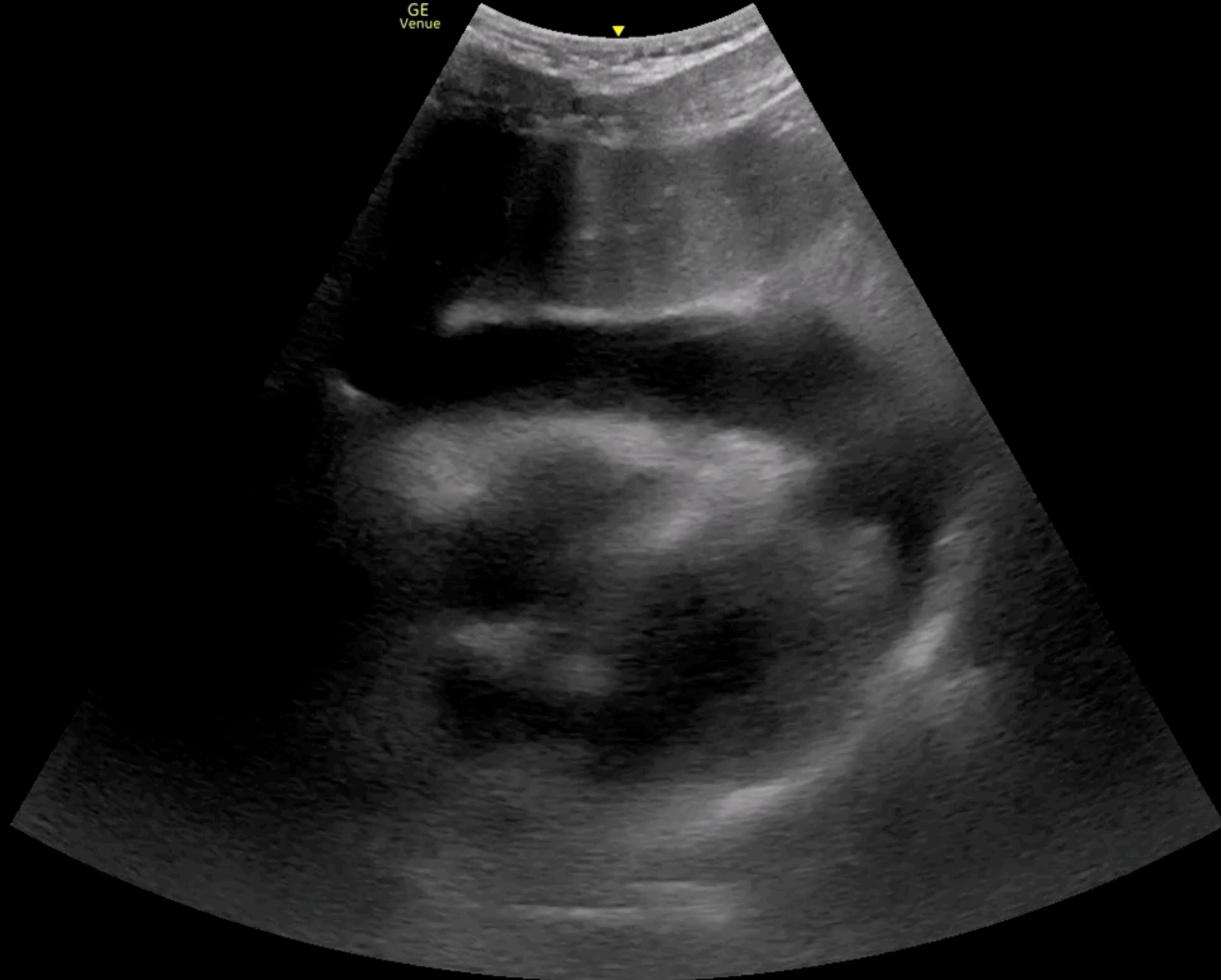
# CASE 4



A 40 years old man with stab wound at cardiac box

Maharajkhonsithammarat Hospital  
21/06/2025 15:54:08  
GE  
Venue

C1-5  
\*\*\*  
Abdomen

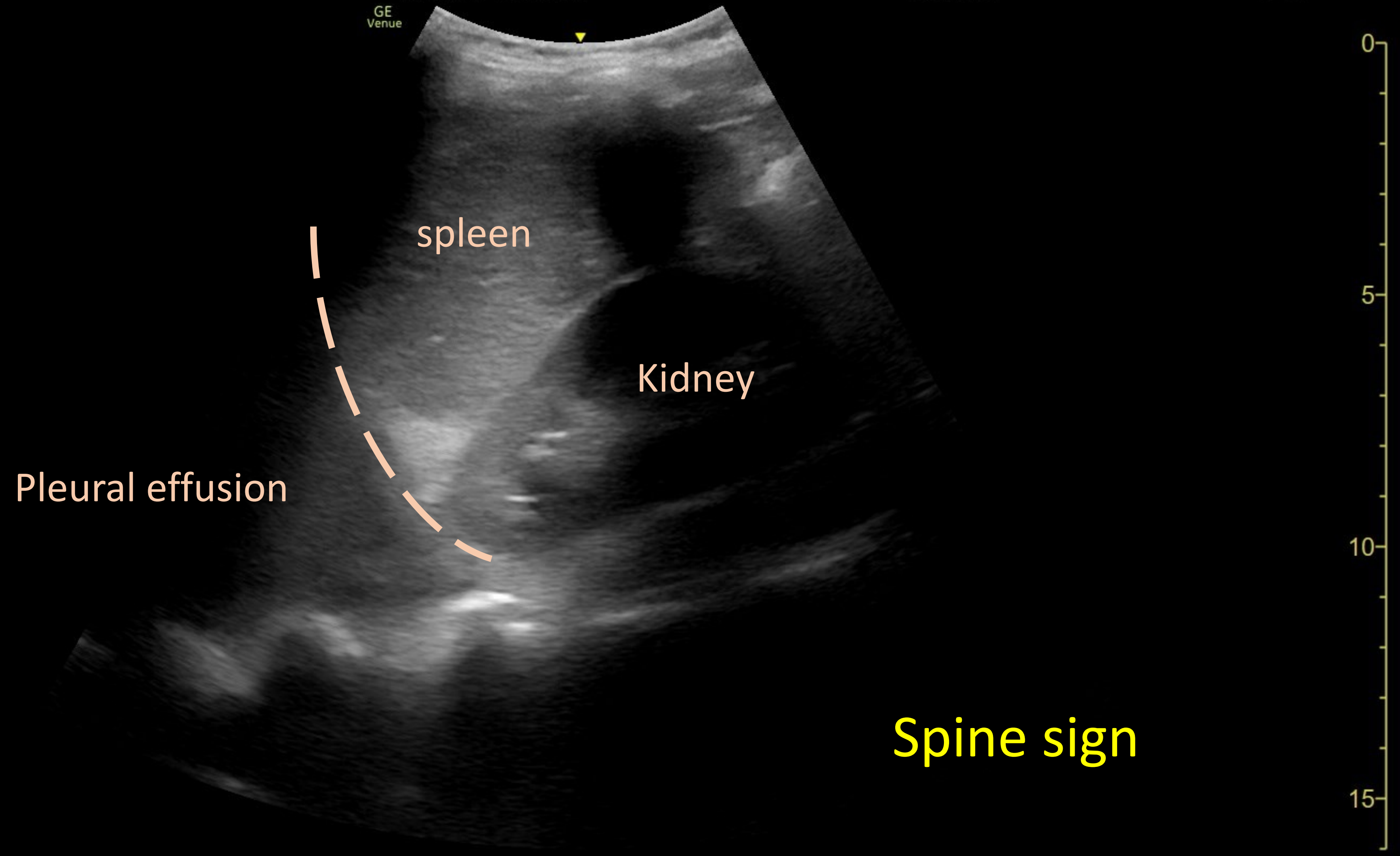


Maharajkhonsithammarat Hospital  
02/04/2025 11:45:02  
GE  
Venue

C1-5  
\*\*\*  
Abdomen



GE  
Venue



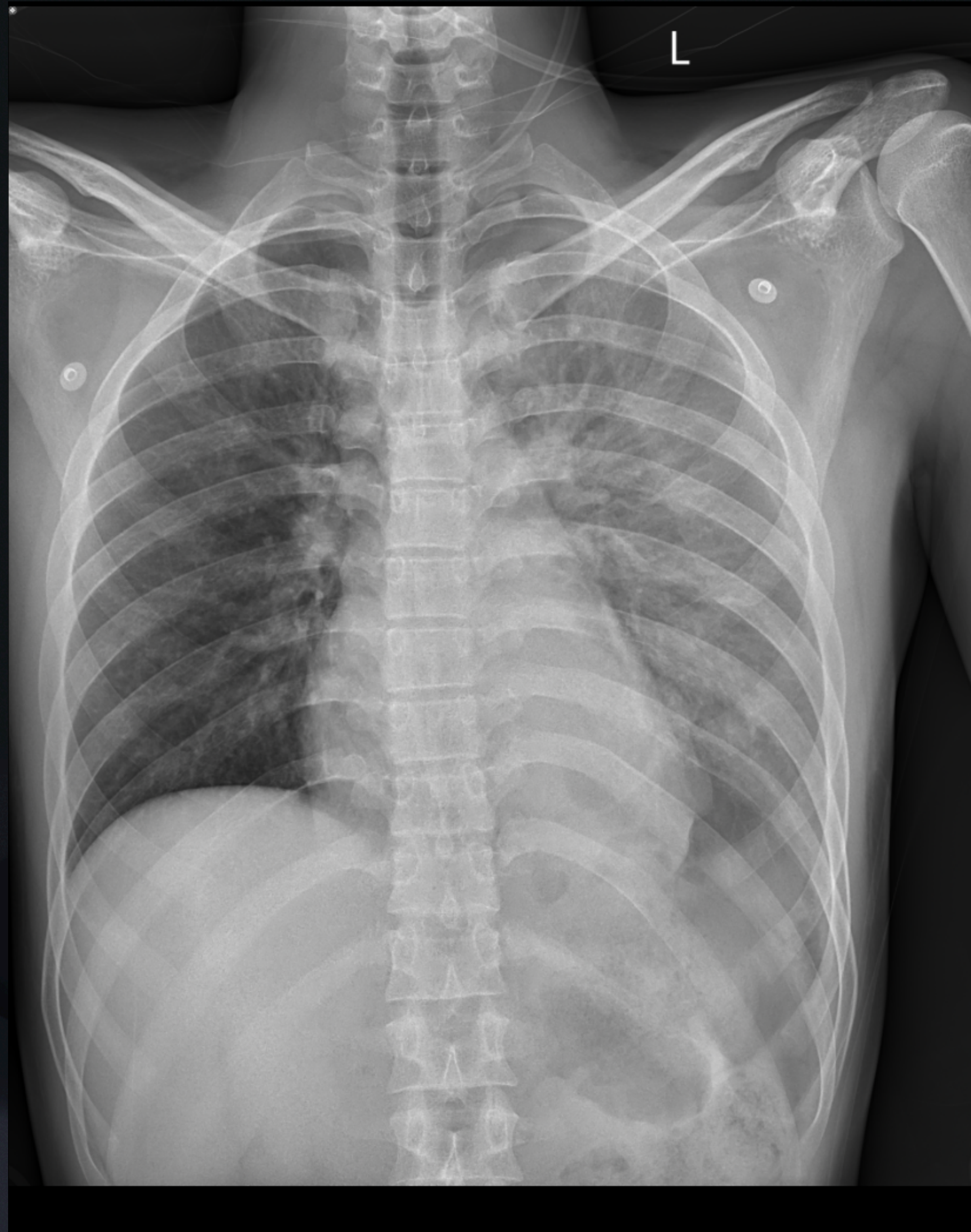
spleen

Kidney

Pleural effusion

Spine sign

0  
5  
10  
15



แบบบันทึกการตรวจผู้ป่วย Trauma สำหรับแพทย์  
 ห้องอุบัติเหตุและฉุกเฉิน โรงพยาบาลนครศรีธรรมราช

ER.DR.REC03

Sticker	Date .....	Brief history :
	Time .....	
Primary survey		Management
A : <input type="radio"/> Patent <input type="radio"/> Compromise due to ..... ..... ..... .....	<input type="radio"/> No need to restrict C-spine motion <input type="radio"/> <u>Need to restrict C-spine motion</u> due to <input type="radio"/> Posterior midline C-spine tenderness <input type="radio"/> Evidence of Intoxication <input type="radio"/> Alter level of alertness <input type="radio"/> Focal neurologic deficit <input type="radio"/> Painful distracting injury	<input type="radio"/> Cervical collar <input type="radio"/> Oxygen mask with bag 11 LPM >> SpO <sub>2</sub> .....% <input type="radio"/> ET tube No.....depth..... >> SpO <sub>2</sub> .....% ETCO <sub>2</sub> ..... <input type="radio"/> LMA ..... <input type="radio"/> ICD <input type="radio"/> Rt No.....fix..... content ..... <input type="radio"/> Lt No.....fix..... content ..... ..... <input type="radio"/> Pressure dressing at ..... <input type="radio"/> Tourniquet at ..... <input type="radio"/> Suture stop bleeding at ..... <input type="radio"/> Pelvic binder <input type="radio"/> Spint Fx site ..... <input type="radio"/> M fluid จำนวน ..... เส้น เส้นที่ 1 ..... เส้นที่ 2 ..... ..... <input type="radio"/> Blood ..... <input type="radio"/> Vasopressor ..... <input type="radio"/> Activate MTP (G/M PRC 6 U, FFP 6 U, Platelet 6 U) <input type="radio"/> NG/OG tube    content ..... <input type="radio"/> Foley's catheter    content .....
B : RR...../min SpO <sub>2</sub> .....% (RA) Trachea & neck ..... Chest ..... .....		
C : BP.....mmHg PR.....bpm CR..... Bleeding : External ..... ..... Internal : <input type="radio"/> Chest <input type="radio"/> Abdomen <input type="radio"/> Retroperitoneum <input type="radio"/> Pelvis <input type="radio"/> Long bone ..... FAST (time.....) <input type="radio"/> negative <input type="radio"/> positive at.....		
D : GCS E..... V..... M..... Pupil Rt ..... Lt ..... Lateralizing sign..... DTX.....mg%		
E : Undress & logroll ..... ..... Temp .....°C PR Sphincter tone <input type="radio"/> normal <input type="radio"/> loose		sign..... (แพทย์)

Sticker

ER.DR.REC03

แบบบันทึกการตรวจผู้ป่วย Trauma สำหรับแพทย์  
ห้องอุบัติเหตุและฉุกเฉิน รพ.มหาสารคามศรีธรรมราช

Secondary survey		Management
History Allergy : .....	Last meal : .....	<input type="checkbox"/> CXR ผล.....
Medication : .....	Event : .....	.....
Past history : .....	.....	<input type="checkbox"/> Film Pelvis ผล.....
Tetanus : .....	.....	<input type="checkbox"/> CT Brain ผล.....
Physical exam GA : .....		.....
HEENT : .....		<input type="checkbox"/> CT C-spine ผล.....
.....		<input type="checkbox"/> Other.....
Chest : .....		.....
Abdomen : .....		.....
Pelvis : .....		.....
Back : .....		<input type="checkbox"/> Transamine 1 g iv drip in 10 min (กรณีเกิดเหตุ < 3 hr)
Extremities : .....		<input type="checkbox"/> Tetanus : dT 0.5 ml IM ( <input type="checkbox"/> 1 course <input type="checkbox"/> booster)
.....		<input type="checkbox"/> IV ATB .....
Neuro : .....		<input type="checkbox"/> Suture at .....
.....		Consult <input type="checkbox"/> Surgery (time.....) <input type="checkbox"/> Ortho (time.....)
Problem list :		<input type="checkbox"/> Other .....
.....		<input type="checkbox"/> D/C Advice .....
.....		<input type="checkbox"/> นัดตัดไหม..... <input type="checkbox"/> นัด F/U.....
.....		HM .....
.....		.....
.....		sign..... (แพทย์)

# บันทึกบาดแผลผู้ป่วยอุบัติเหตุ โรงพยาบาลมหाराชนครศรีธรรมราช

ชื่อ..... อายุ.....ปี HN..... AN.....

วันที่..... เวลา..... X-Rays No. ....

คดี       ไม่คดี

รูปภาพรายละเอียดบาดแผล



ศีรษะ



ทรวงอก

FM-102.3-22

แก้ไขครั้งที่ 1 ประกาศใช้ ตุลาคม 2564

Rt.brachial artery.....  
Rt.radial artery.....  
Rt.popliteal artery.....  
Rt.dorsalis pedis artery.....

Lt.brachial artery.....  
Lt.radial artery.....  
Lt.popliteal artery.....  
Lt.dorsalis pedis artery.....

ระดับ Intensity 0 , 1+ , 2+

ลงชื่อ.....