



**EAST MULTICENTER STUDY
DATA COLLECTION TOOL**

Multicenter Study: Effect of Regional Anesthesia on Delirium in Geriatric Trauma Patients with Multiple Rib Fractures

Enrolling Center: University of Washington, Harborview Medical Center
Enrolling Co-investigators: Kathleen O'Connell M.D., Bryce Robinson M.D., M.S., Saman Arbabi M.D., M.P.H., F.A.C.S.

Demographics / Injury Variables:

Age: _____

Gender: Female Male

Race: Caucasian African American Asian American Indian or Alaska Native
Native Hawaiian / Other Pacific Islander Missing Other: _____

Ethnicity: Not Hispanic or Latino Hispanic or Latino Missing Other: _____

Injury Data:

Mechanism of Injury:

MVC Fall Pedestrian Struck Bicycle MCC Other _____

ISS: _____

Max Chest AIS: _____

Flail Segment: YES / NO

Hemopneumothorax: YES / NO

Sternal Fracture: YES / NO

Chest Tube Placement: YES / NO

ICU Variables:

Admission Date: _____

Discharge Date: _____

Intubation: YES / NO

Number of Ventilator Days: _____

Respiratory Complication Data (check all that apply)

Pneumonia: _____

Empyema: _____

Aspiration: _____

Operative Data (check all that apply)

- Thoracic Operation

Thoracotomy: _____

Video-assisted thoracoscopic surgery (VATs): _____

Rib stabilization: _____

Other: _____

To be submitted separately in excel sheet

- ICU admission and discharge dates
- Daily CAM-ICU assessment

Pain Service Data:

Placement of Regional Anesthesia: YES / NO

Type of Regional Anesthesia

Epidural Catheter Paravertebral Catheter

Date of Catheter Insertion: _____

Date of Catheter Removal: _____

Hospital Data:

Admission Date: _____

Discharge Date: _____

Hospital Length of Stay (days): _____

Discharge Disposition:

Home SNF Rehab Hospice Morgue Shelter Other: _____

In-hospital Mortality: YES / NO



EAST MULTICENTER STUDY DATA DICTIONARY

Effect of Regional Anesthesia on Delirium in Geriatric Trauma Patients with Multiple Rib Fractures

Data Entry Points and appropriate definitions / clarifications:

Entry space	Definition / Instructions
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Demographics / Injury Variables

Age	Age of patient enrolled
Gender	Gender of patient enrolled
Race	Race of patient enrolled (circle one)
Ethnicity	Ethnicity of patient enrolled (circle one)

Injury Data

Mechanism of Injury	MVC = motor vehicle collision, Pedestrian Struck = person walking hit by car, Bicycle = person injured while riding bicycle, MCC = motorcycle collision. Enter mechanism if not found in this list. (Circle one)
ISS	Numerical value for calculated Injury Severity Score (ISS)
Max AIS Chest	Highest numerical value for abbreviated injury scale (AIS) body region = Chest. Use scale below for calculation.

Organ Injury Scaling Chest Wall

Grade	Injury Description	AIS-90
I	Contusion Any size	1
	Laceration Skin and subcutaneous	1
	Fracture <3 ribs, closed nondisplaced clavicle, closed	1-2 2
II	Laceration Skin, subcutaneous and muscle	1
	Fracture =>3 adjacent ribs, closed	2-3
	Open or displaced clavicle	2
	Nondisplaced sternum, closed Scapular body	2 2
III	Laceration Full thickness including pleura	2
	Fracture Open, displaced or flail sternum	2
	Unilateral flail segment <3 ribs	3-4
IV	Laceration Avulsion of chest wall tissues with underlying rib fractures	4
	Fracture Unilateral flail chest => 3 ribs	3-4
V	Fracture Bilateral flail chest	5

Advance one grade for bilateral injuries.

<http://www.trauma.org/archive/scores/ois-cheswall.htm>

Flail Segment	Defined as 2 rib fractures in the same rib, in at least two adjacent ribs
Hemopneumothorax	Indicate YES if patient has a pneumothorax, hemothorax, or hemopneumothorax
Sternal Fracture	YES if presence of sternal fracture
Chest Tube Placement	YES if chest tube was placed during the admission

ICU Variables

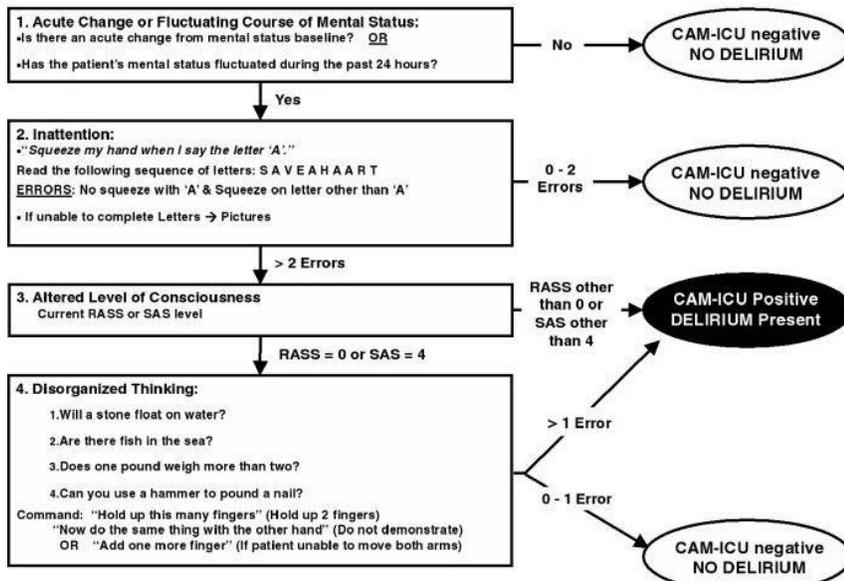
****Include only data from the patient's first admission to the ICU. Data from subsequent admissions to the ICU should not be submitted.***

Admission Date	Date the patient was admitted to the intensive care unit. Include <i>only</i> the first admission to ICU in the event that the patient had multiple admissions
Discharge Date	Date the patient was discharged from the intensive care unit. Include <i>only</i> the first discharge from the ICU in the event that the patient had multiple discharges
Intubation	Circle one to indicate if the patient required intubation during the index admission
Number of Ventilator Days	Number of days the patient remained intubated. Include intubation and extubation dates in total number of days
Respiratory Complication Data	Check all that apply. Pneumonia is either hospital-acquired pneumonia or ventilator-associated pneumonia (both require new lung infiltrate plus clinical evidence that the infiltrate is of infectious origin – new fever, purulent sputum, leukocytosis, worsening hypoxia), Empyema (accumulation of infected purulent fluid in the chest), Aspiration (witnessed aspiration event during hospitalization).
Operative Data	Check all that apply to patient during initial admission. Rib stabilization = open surgical fixation of rib fractures
Daily CAM-ICU scores	CAM-ICU assessments performed in the ICU should be submitted for each patient with the associated date in an excel spreadsheet. Each ICU day should have either +delirium or –delirium indicated. When multiple CAM-ICU assessments were performed in a day, one +delirium score equals a +delirium day. If no assessment was performed for an ICU day, indicate N/A. See below example table and flow diagram for scoring purposes.

	ICU admission date	ICU discharge date	ICU day #1	ICU day #2	ICU day #3	ICU day #4	ICU day #5
Patient A	1/1/11	1/5/11	+	+	+	-	-
Patient B	1/2/11	1/4/11	-	-	-		
Patient C	1/3/11	1/7/11	N/A	-	+	+	N/A

Confusion Assessment Method for the ICU (CAM-ICU) Flowsheet

Delirium can only be assessed in patients more alert than RASS -3 or SAS 3



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Source: Crit Care Med © 2013 Lippincott Williams & Wilkins

http://www.medscape.com/viewarticle/810233_4

Pain Service Data:

Placement of Regional Anesthesia

Regional anesthesia is the use of local anesthetics to block sensations of pain. For the purposes of this study, check YES if regional anesthesia was placed in the thoracic region to block chest wall pain.

Type of Regional Anesthesia

Epidural catheter is defined as a catheter inserted into the epidural space of the spinal cord for delivery of analgesic medications. Paravertebral catheter is inserted in the space immediately lateral to where the spinal nerves emerge from the intervertebral foramina for delivery of analgesic medications.

Date of Catheter Insertion

Date the catheter was inserted

Date of Catheter Removal

Date the catheter was removed

Hospital Data:

Admission Date

Date the patient was admitted to the hospital

Discharge Date

Date the patient was discharged from the hospital

Hospital Length of Stay

Number of days the patient was admitted to the hospital. Include admission day and discharge day as whole days in the total calculation. Hospital admission day = hospital day #1

Discharge Disposition

Indicate the location of where the patient was discharged to from the hospital

In-hospital Morality

Did the patient expire during hospital admission?