

JTACS JANUARY TABLE OF CONTENTS

'BEST OF' JANUARY ARTICLES

BEST OF TRAUMA ARTICLE

Predictors of Fetal Delivery (FD) in Pregnant Trauma Patients (PTPs)

Study Population	Results	Conclusions
Multicenter retrospective study 12 Level-I/II Trauma Centers (2016-2021) 591 PTPs Inclusion: ≥18 years old ≥24 weeks gestational age	Fetal Delivery Rate = 10.7% Independent risk factors for fetal delivery on Multivariable Analysis: - Gestational Age (weeks > 24-weeks) - Abdominal Injury - Abnormal Fetal Heart Tracing - Premature Rupture of Membranes	These risk factors can help prognosticate fetal delivery and need for observation in the setting of trauma and shape future guidelines regarding observation of PTPs.

Santos J et al. *Journal of Trauma and Acute Care Surgery*. DOI: 10.1097/TA.0000000000003954

The Journal of Trauma and Acute Care Surgery

PREDICTORS OF FETAL DELIVERY IN PREGNANT TRAUMA PATIENTS: A MULTICENTER STUDY

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/PREDICTORS_OF_FETAL_DELIVERY_IN_PREGNANT_TRAUMA.14.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/predictors_of_fetal_delivery_in_pregnant_trauma.14.aspx)



SCAN HERE TO VIEW A VIDEO OVERVIEW OF THE ARTICLE

<https://qr.page/g/51md3ifeTMI>

BEST OF SCC ARTICLE

Extracorporeal Life Support in Trauma: Indications and Techniques

Retrospective review of ECLS deployment in trauma Jan 2014 – Feb 2021 ELSO-accredited, Provincial level 1 trauma center Multidisciplinary review and consensus of all cases for indications and technical approach	Circulatory Support (CS) • 7 patients • VA ECLS • 37% survival to decannulation • Specific indications: blunt and penetrating cardiac injury, hypothermia with cardiogenic shock, E-CPR	Extended Damage Control (EDC) • 8 patients • VV ECLS • 75% survival to decannulation • Specific indications: Intraabdominal injuries, High grade liver injuries, retrohepatic venous injuries, often for hepatic vascular isolation
--	--	--

Lee A et al. *Journal of Trauma and Acute Care Surgery*. DOI: 10.1097/TA.0000000000004043

The Journal of Trauma and Acute Care Surgery

EXTRACORPOREAL LIFE SUPPORT IN TRAUMA: INDICATIONS AND TECHNIQUES

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/EXTRACORPOREAL_LIFE_SUPPORT_IN_TRAUMA_INDICATIONS.19.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/extracorporeal_life_support_in_trauma_indications.19.aspx)



SCAN HERE TO VIEW A VIDEO OVERVIEW OF THE ARTICLE

<https://qr.page/g/4rlgByl33pU>

BEST OF BASIC SCIENCES ARTICLE

Post-Traumatic Pneumonia Exacerbates Erythropoietic Bone Marrow Dysfunction

Aim: Determine the mechanism of bone marrow dysfunction in trauma and critical illness Early Erythroid Progenitors CFU-GEMM BFU-E CFU-E Erythroblastic Island (EBI)	Rodent Model of Polytrauma (PT) and Polytrauma + Postinjury Day 1 Pseudomonas Pneumonia (PT+PNA) Collection and analysis of blood and bone marrow on Day 7	Decreased hemoglobin (PT+PNA > PT) Decreased growth of early erythroid progenitors (PT+PNA > PT) More EBI dysfunction (PT+PNA > PT)
---	--	---

Mohr AM et al. *Journal of Trauma and Acute Care Surgery*. DOI: 10.1097/TA.0000000000004157

The Journal of Trauma and Acute Care Surgery

POST-TRAUMATIC PNEUMONIA EXACERBATES BONE MARROW DYSFUNCTION

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/POSTTRAUMATIC_PNEUMONIA_EXACERBATES_BONE_MARROW.3.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/posttraumatic_pneumonia_exacerbates_bone_marrow.3.aspx)

BEST OF EGS ARTICLE

Predictors of acute incisional hernia incarceration at initial hernia diagnosis on computed tomography

Case-control study of 532 patients with incisional hernia 532 patients 238 cases 294 controls Patients suffering an acute incarceration event (cases) were compared to patients with successful non-operative management (controls)	Radiographic features associated with future acute incarceration at index date of diagnosis Small bowel contents - Smaller hernia defect area - Larger hernia sac height - More acute hernia angle - Increased subcutaneous adipose tissue Hernia characteristics at diagnosis can guide indications for elective repair
---	--

Hrebinko K et al. *Journal of Trauma and Acute Care Surgery*. DOI: 10.1097/TA.0000000000003994

The Journal of Trauma and Acute Care Surgery

PREDICTORS OF ACUTE INCISIONAL HERNIA INCARCERATION AT INITIAL HERNIA DIAGNOSIS ON COMPUTED TOMOGRAPHY

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/PREDICTORS_OF_ACUTE_INCISIONAL_HERNIA.17.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/predictors_of_acute_incisional_hernia.17.aspx)

Post-Traumatic Pneumonia Exacerbates Erythropoietic Bone Marrow Dysfunction

Aim: Determine the mechanism of bone marrow dysfunction in trauma and critical illnesses

Rodent Model of Polytrauma (PT) and Polytrauma + Postinjury Day 1 Pseudomonas Pneumonia (PT+PNA)

Early Erythroid Progenitors
CFU-GEMM BFU-E CFU-E

Erythroblastic Island (EBI)

Collection and analysis of blood and bone marrow on Day 7

Decreased hemoglobin (PT+PNA > PT)

Decreased growth of early erythroid progenitors (PT+PNA > PT)

More EBI dysfunction (PT+PNA > PT)

Mohr AM et al. *Journal of Trauma and Acute Care Surgery*. DOI: 10.1097/JA.00000000000004157

@JTraumaAcuteSurg

Copyright © 2023 Wolters Kluwer Health, Inc. All rights reserved.

The Journal of Trauma and Acute Care Surgery

POST-TRAUMATIC PNEUMONIA EXACERBATES BONE MARROW DYSFUNCTION

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/POSTTRAUMATIC_PNEUMONIA_EXACERBATES_BONE_MARROW.3.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/POSTTRAUMATIC_PNEUMONIA_EXACERBATES_BONE_MARROW.3.ASPX)

Multicenter Evaluation of Financial Toxicity and Long-Term Health Outcomes After Injury

Study Population

MTQIP Trauma Registry

Data from statewide quality collaborative combined with long term patient-reported outcomes from 9 Centers, 403 patients, \$10 surveys. (Mean follow-up at 6 months)

Elements of Financial Toxicity

- Medical Debt
- Non-medical financial strain
- Work or Income Loss
- Delayed Care due to inability to pay

7 Measures of Long-term Health

- Self-reported Health
- EuroQoL Index
- 5 Health Domains of EuroQoL-5D

Regression Models Adjusting for:

- Patient Demographics
- Injury Traits
- Treatment Intensity
- Health Systems Characteristics

Key Findings: Financial Toxicity is... Common: 65% with one or more elements of financial toxicity

Independently associated with worse long-term health in a dose-dependent manner

Predicted by patient demographics (Income, insurance, age) and not injury or treatment severity

Scott JW et al. *Journal of Trauma and Acute Care Surgery*. DOI: 10.1097/JA.00000000000004161

@JTraumaAcuteSurg

Copyright © 2023 Wolters Kluwer Health, Inc. All rights reserved.

The Journal of Trauma and Acute Care Surgery

MULTICENTER EVALUATION OF FINANCIAL TOXICITY AND LONG-TERM HEALTH OUTCOMES AFTER INJURY

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/MULTICENTER_EVALUATION_OF_FINANCIAL_TOXICITY_AND_7.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/MULTICENTER_EVALUATION_OF_FINANCIAL_TOXICITY_AND_7.ASPX)

DELAYED TXA AFTER TBI IMPEDES LEARNING, MEMORY; EARLY TXA IS FAVORABLE BUT NOT IN SHAM ANIMALS

Study Population

- 25 CD1 mice
- Sham vs. TBI (CCI)
- TXA @ 1 vs. 24h
- Morris Water Maze: Spatial learning Memory

Results

CCI+TXA 1h but not CCI+TXA 24h

- Fastest weight gain (p=0.001)
- ↑ time in ↓ distance to target in Spatial Learning trials (p<0.05)
- ↑ time & frequency in target in Probe Memory Trials (p<0.01)

Conclusions

- TXA 24hr Post TBI
- TXA 1hr Post-TBI
- 1hr TXA Post-TBI: Faster recovery
- TXA in sham: ? harm

Pascual JL et al. *Journal of Trauma and Acute Care Surgery*. DOI: 10.1097/JA.00000000000004155

@JTraumaAcuteSurg

Copyright © 2023 Wolters Kluwer Health, Inc. All rights reserved.

The Journal of Trauma and Acute Care Surgery

DELAYED TXA AFTER TBI IMPEDES LEARNING, MEMORY; EARLY TXA IS FAVORABLE BUT NOT IN SHAM ANIMALS

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/DELAYED_TRANEXAMIC_ACID_AFTER_TRAUMATIC_BRAIN.4.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/DELAYED_TRANEXAMIC_ACID_AFTER_TRAUMATIC_BRAIN.4.ASPX)

Where you get hurt matters: Impact of geography and EMS system resource availability on air medical transport after trauma

Ground vs. Air Medical Transport: What tips the scale?

Factor Importance Stratified by Resource Availability

- High & Low resources
- Moderate resources

Regression Model of Variable Importance

Brown JB et al. *Journal of Trauma and Acute Care Surgery*. DOI: 10.1097/JA.00000000000004153

@JTraumaAcuteSurg

Copyright © 2023 Wolters Kluwer Health, Inc. All rights reserved.

The Journal of Trauma and Acute Care Surgery

IMPACT OF PATIENT, SYSTEM, AND ENVIRONMENTAL FACTORS ON UTILIZATION OF AIR MEDICAL TRANSPORT AFTER TRAUMA

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/IMPACT_OF_PATIENT_SYSTEM_AND_ENVIRONMENTAL.8.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/IMPACT_OF_PATIENT_SYSTEM_AND_ENVIRONMENTAL.8.ASPX)

Would You Be Surprised? Prospective Multicenter Study of the Utility of the Surprise Question in Predicting 1-Year Mortality of 1,172 Trauma Patients

TQIP guidelines recommend palliative care (PC) assessment within 72h of admission for trauma patients

10 Trauma Centers:

- 5 Level I
- 5 Level II
- 1,172 patients
- 3,145 provider responses

PPV, NPV and Accuracy were similar across all provider types

MEASURE	OVERALL
PPV	30.5%
NPV	95.1%
ACCURACY	73.8%

To determine PC needs, further research is needed to establish optimal SQ timing for trauma patients

Can the Surprise Question (SQ) be used to predict trauma patient mortality and improve early PC?

Fakhry SM et al. *Journal of Trauma and Acute Care Surgery*. DOI: 10.1097/JA.00000000000004151

@JTraumaAcuteSurg

Copyright © 2023 Wolters Kluwer Health, Inc. All rights reserved.

The Journal of Trauma and Acute Care Surgery

WOULD YOU BE SURPRISED? PROSPECTIVE MULTICENTER STUDY OF THE SURPRISE QUESTION AS A SCREENING TOOL TO PREDICT MORTALITY IN TRAUMA PATIENTS

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/WOULD_YOU_BE_SURPRISED_PROSPECTIVE_MULTICENTER.5.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/WOULD_YOU_BE_SURPRISED_PROSPECTIVE_MULTICENTER.5.ASPX)

Cues to Care: Chronic Disease Diagnosis in Young Adult Trauma Patients

Undiagnosed disease (UD) is common in this population

Disease status is associated with outcomes

Trauma admissions are a key care opportunity

76.8% patients 18-40yr had evidence of at least one UD

Cohorts with undiagnosed and/or previously diagnosed chronic disease had significantly higher rates of:

- Inpatient complications
- ICU admissions
- 30-day Readmissions
- 30-day ED visits

UD likelihood is increased in:

- Younger age
- Male
- Uninsured

< 1 in 4 patients with a PCP

Having a PCP did not decrease the odds of UD

Adams UC et al. *Journal of Trauma and Acute Care Surgery*. DOI: 10.1097/JA.00000000000004149

@JTraumaAcuteSurg

Copyright © 2023 Wolters Kluwer Health, Inc. All rights reserved.

The Journal of Trauma and Acute Care Surgery

CUES TO CARE: CHRONIC DISEASE DIAGNOSIS IN YOUNG ADULT TRAUMA PATIENTS

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/CUES_TO_CARE_CHRONIC_DISEASE_DIAGNOSIS_IN_YOUNG.9.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/CUES_TO_CARE_CHRONIC_DISEASE_DIAGNOSIS_IN_YOUNG.9.ASPX)

DO HOSPITAL-BASED EMERGENCY MEDICAID PROGRAMS BENEFIT TRAUMA CENTERS? A MIXED-METHODS ANALYSIS

HPE Participation in California by 2021

Change in Medicaid Revenue by HPE and Trauma Center Status

Hospital Financial Stakeholder Interviews

HPE benefits trauma centers by:

- "stopping the bleed" of bad debt and uncompensated care
- improving patient experience and access to post-discharge resources

Knowlton LM et al. *Journal of Trauma and Acute Care Surgery*. DOI: 10.1097/JA.00000000000004162

@JTraumaAcuteSurg

Copyright © 2023 Wolters Kluwer Health, Inc. All rights reserved.

The Journal of Trauma and Acute Care Surgery

DO HOSPITAL-BASED EMERGENCY MEDICAID PROGRAMS BENEFIT TRAUMA CENTERS? A MIXED-METHODS ANALYSIS

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/DO_HOSPITAL_BASED_EMERGENCY_MEDICAID_PROGRAMS.6.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/DO_HOSPITAL_BASED_EMERGENCY_MEDICAID_PROGRAMS.6.ASPX)

Getting Out of the Bay Faster: Assessing Trauma Team Performance Using Trauma Video Review

Study Aim: To measure trauma team performance using T-NOTECHS (Trauma Non-Technical Skills)

Hypothesis: Better team performance scores = decreased time to the next phase of care for patients in hemorrhagic shock

Results: 19 trauma centers

Team components associated with faster times to next phase of care:

- Leadership
- Communication
- Decision making
- Situational awareness

Larger trauma teams = SLOWER

Conclusions:

- Trauma team training should focus on optimizing team performance towards faster hemorrhage control

Maiga A et al. *Journal of Trauma and Acute Care Surgery*. DOI: 10.1097/JA.00000000000004168

@JTraumaAcuteSurg

Copyright © 2023 Wolters Kluwer Health, Inc. All rights reserved.

The Journal of Trauma and Acute Care Surgery

GETTING OUT OF THE BAY FASTER: ASSESSING TRAUMA TEAM PERFORMANCE USING TRAUMA VIDEO REVIEW

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/GETTING_OUT_OF_THE_BAY_FASTER_ASSESSING_TRAUMA.10.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/GETTING_OUT_OF_THE_BAY_FASTER_ASSESSING_TRAUMA.10.ASPX)

Maximizing wound coverage in soft tissue reconstruction: results from a randomized-controlled trial of autologous skin cell suspension (ASCS) and widely meshed autograft compared with standard autografting

Acute nonthermal full-thickness wounds requiring autografting
65 patients 2 areas ≥ 80 cm²

Randomization
Control = SOC mSTSG
Treatment = wider mSTSG + ASCS

Co-primary endpoints
1) Non-inferiority of ASCS + mSTSG for complete treatment area closure by Week 8
2) Superiority for relative reduction in donor skin area

ASCS+STSG healing noninferior to lesser meshed STSG alone
ASCS+STSG donor skin requirements superior to lesser meshed STSG alone

58% Control
65% Treatment

27% POSAS Evaluated

No difference in long-term scar appearance

Henry S et al. *Journal of Trauma and Acute Care Surgery*. DOI: 10.1097/JA.0000000000004120
@JTraumaAcuteSurg
Copyright © 2023 Wolters Kluwer Health, Inc. All rights reserved. The Journal of Trauma and Acute Care Surgery

MAXIMIZING WOUND COVERAGE IN FULL-THICKNESS SKIN DEFECTS: A RANDOMIZED-CONTROLLED TRIAL OF AUTOLOGOUS SKIN CELL SUSPENSION AND WIDELY MESHED AUTOGRAFT VERSUS STANDARD AUTOGRAFTING
[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/MAXIMIZING_WOUND_COVERAGE_IN_FULL_THICKNESS_SKIN.11.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/maximizing_wound_coverage_in_full_thickness_skin.11.aspx)

Mitigation of Trauma-Induced Endotheliopathy by Activated Protein C: A potential therapeutic for post-injury thromboinflammation

Ex Vivo Plasma taken from Severely Injured Patients In Shock at a Level I Trauma Center

Endothelial cells pre-incubated with 3K3A-APC had decreased permeability in the presence of ex vivo trauma plasma

Cytoprotective 3K3A-APC is promising therapy for the endotheliopathy of trauma

Thielen ON et al. *Journal of Trauma and Acute Care Surgery*. DOI: 10.1097/JA.0000000000004142
@JTraumaAcuteSurg
Copyright © 2023 Wolters Kluwer Health, Inc. All rights reserved. The Journal of Trauma and Acute Care Surgery

MITIGATION OF TRAUMA INDUCED ENDOTHELIOPATHY BY ACTIVATED PROTEIN C: A POTENTIAL THERAPEUTIC FOR POST-INJURY THROMBOINFLAMMATION
[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/MITIGATION_OF_TRAUMA_INDUCED_ENDOTHELIOPATHY_BY.15.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/mitigation_of_trauma_induced_endotheliopathy_by.15.aspx)

TXA does not affect levels of TBI-related biomarkers in blunt TBI with ICH

Study Population
Patients with blunt TBI and ICH Randomized to placebo or 1 of 2 TXA treatment groups

Results
Placebo 1g bolus + 1g infusion 2g bolus
No difference in Δ biomarker levels over 24 hours
GFAP and UCH-L1 associated with 28-day mortality

Conclusions
TBI biomarkers do not demonstrate treatment effect of TXA
Biomarkers are associated with 28-day mortality in patients receiving TXA

GFAP, UCH-L1, MAP-2

Hoefler L et al. *Journal of Trauma and Acute Care Surgery*. DOI: 10.1097/JA.0000000000004130
@JTraumaAcuteSurg
Copyright © 2023 Wolters Kluwer Health, Inc. All rights reserved. The Journal of Trauma and Acute Care Surgery

TXA DOES NOT AFFECT LEVELS OF TBI-RELATED BIOMARKERS IN BLUNT TBI WITH ICH: A SECONDARY ANALYSIS OF THE PREHOSPITAL TXA FOR TBI TRIAL
[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/TXA_DOES_NOT_AFFECT_LEVELS_OF_TBI-RELATED.12.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/txa_does_not_affect_levels_of_tbi_related.12.aspx)

Predictors of acute incisional hernia incarceration at initial hernia diagnosis on computed tomography

Case-control study of 532 patients with incisional hernia

532 patients
238 cases 294 controls

Patient and CT characteristics compared between cases and controls

Small bowel contents - Smaller hernia defect area - Larger hernia sac height - More acute hernia angle - Increased subcutaneous adipose tissue

Hernia characteristics at diagnosis can guide indications for elective repair

Hrebinko K et al. *Journal of Trauma and Acute Care Surgery*. DOI: 10.1097/JA.0000000000003994
@JTraumaAcuteSurg
Copyright © 2023 Wolters Kluwer Health, Inc. All rights reserved. The Journal of Trauma and Acute Care Surgery

PREDICTORS OF ACUTE INCISIONAL HERNIA INCARCERATION AT INITIAL HERNIA DIAGNOSIS ON COMPUTED TOMOGRAPHY
[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/PREDICTORS_OF_ACUTE_INCISIONAL_HERNIA.17.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/predictors_of_acute_incisional_hernia.17.aspx)

Platelet-inspired synthetic nanoparticles improve hemostasis and hemodynamics in a rabbit model of abdominal hemorrhage

Study Population
Rabbit hemorrhage model Synthetic platelet (SP) vs control particle (CP) vs buffer pretreatment

Results & Conclusions
SP pretreatment decreases blood loss and better maintains blood pressure compared to CP- and buffer-treated animals

Srinivasan AJ et al. *Journal of Trauma and Acute Care Surgery*. DOI: 10.1097/JA.0000000000003938
@JTraumaAcuteSurg
Copyright © 2023 Wolters Kluwer Health, Inc. All rights reserved. The Journal of Trauma and Acute Care Surgery

PLATELET-INSPIRED SYNTHETIC NANOPARTICLES IMPROVE HEMOSTASIS AND HEMODYNAMICS IN A RABBIT MODEL OF ABDOMINAL HEMORRHAGE
[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/PLATELET-INSPIRED_SYNTHETIC_NANOPARTICLES_IMPROVE.13.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/platelet_inspired_synthetic_nanoparticles_improve.13.aspx)

Optimal Dose of Cryoprecipitate in Massive Transfusion Following Trauma

Research Question
What is the optimal dose of cryoprecipitate (Cryo) during trauma resuscitation?

Definitions
RBC:Cryo ratios calculated using transfusion volumes within 4 hours
Primary outcome: 24-hour mortality

RBC:Cryo 7:1-8:1

1 unit of Cryo per 7-8 units of RBC was the lowest dose of Cryo associated with significantly lower mortality compared to "No Cryo" and not significantly associated with higher mortality compared to "Max Cryo" (1:1 - 2:1).

Conclusion
One pooled unit of Cryo (100 mL) per 7-8 units of RBC could be the optimal dose of Cryo in trauma resuscitation that provides a significant survival benefit while avoiding unnecessary blood product transfusions.

Dorken-Gallastegi A et al. *Journal of Trauma and Acute Care Surgery*. DOI: 10.1097/JA.0000000000004060
@JTraumaAcuteSurg
Copyright © 2023 Wolters Kluwer Health, Inc. All rights reserved. The Journal of Trauma and Acute Care Surgery

OPTIMAL DOSE OF CRYOPRECIPITATE IN MASSIVE TRANSFUSION FOLLOWING TRAUMA
[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/OPTIMAL_DOSE_OF_CRYOPRECIPITATE_IN_MASSIVE.18.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/optimal_dose_of_cryoprecipitate_in_massive.18.aspx)

Predictors of Fetal Delivery (FD) in Pregnant Trauma Patients (PTPs)

Study Population
Multicenter retrospective study
12 Level-I/II Trauma Centers (2016-2021)
591 PTPs
Inclusion: ≥ 18 years old ≥ 24 weeks gestational age

Results
Fetal Delivery Rate = 10.7%
Independent risk factors for fetal delivery on Multivariable Analysis:
- Gestational Age (weeks > 24-weeks)
- Abdominal Injury
- Abnormal Fetal Heart Tracing
- Premature Rupture of Membranes

Conclusions
These risk factors can help prognosticate fetal delivery and need for observation in the setting of trauma and shape future guidelines regarding observation of PTPs.

Santos J et al. *Journal of Trauma and Acute Care Surgery*. DOI: 10.1097/JA.0000000000003964
@JTraumaAcuteSurg
Copyright © 2023 Wolters Kluwer Health, Inc. All rights reserved. The Journal of Trauma and Acute Care Surgery

PREDICTORS OF FETAL DELIVERY IN PREGNANT TRAUMA PATIENTS: A MULTICENTER STUDY
[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/PREDICTORS_OF_FETAL_DELIVERY_IN_PREGNANT_TRAUMA.14.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/predictors_of_fetal_delivery_in_pregnant_trauma.14.aspx)

Extracorporeal Life Support in Trauma: Indications and Techniques

Retrospective review of ECLS deployment in trauma
Jan 2014 - Feb 2021

ELSO-accredited, Provincial level 1 trauma center
Multidisciplinary review and consensus of all cases for indications and technical approach

Circulatory Support (CS)
7 patients
VA ECLS
57% survival to decannulation
Specific indications: blunt and penetrating cardiac injury, hypothermia with cardiogenic shock, E-CPR

Gas Exchange (GE)
10 patients
VV ECLS
90% survival to decannulation
Specific indications: respiratory failure, ARDS

Extended Damage Control (EDC)
8 patients
VV ECLS
75% survival to decannulation
Specific indications: intraabdominal injuries, high grade liver injuries, retrohepatic venous injuries, often for hepatic vascular isolation

Indications for ECLS fall into predictable categories for which streamlined logistics and well-strategized technical approaches can improve ECLS deployment in trauma

Lee A et al. *Journal of Trauma and Acute Care Surgery*. DOI: 10.1097/JA.0000000000004043
@JTraumaAcuteSurg
Copyright © 2023 Wolters Kluwer Health, Inc. All rights reserved. The Journal of Trauma and Acute Care Surgery

EXTRACORPOREAL LIFE SUPPORT IN TRAUMA: INDICATIONS AND TECHNIQUES
[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/EXTRACORPOREAL_LIFE_SUPPORT_IN_TRAUMA_INDICATIONS.19.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/extracorporeal_life_support_in_trauma_indications.19.aspx)

AAST PRESIDENTIAL ADDRESS 2023
**“WE ARE IN THIS TOGETHER”:
THE POWER OF SOCIAL CONNECTION**
[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/_WE_ARE_IN_THIS_TOGETHER__THE_POWER_OF_SOCIAL.1.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/_we_are_in_this_together__the_power_of_social.1.aspx)

AAST 2023- FITTS ORATION
ENDURE, ADAPT, SURVIVE AND THRIVE
[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/ENDURE,_ADAPT,_SURVIVE,_AND_THRIVE.2.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/ENDURE,_ADAPT,_SURVIVE,_AND_THRIVE.2.aspx)

NO VISUAL ABSTRACT PROVIDED
**ADULT BLUNT HEPATIC INJURY: A WESTERN TRAUMA
ASSOCIATION CRITICAL DECISIONS ALGORITHM**
[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/ADULT_BLUNT_HEPATIC_INJURY_A_WESTERN_TRAUMA.16.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/ADULT_BLUNT_HEPATIC_INJURY_A_WESTERN_TRAUMA.16.aspx)

NO VISUAL ABSTRACT PROVIDED
CONTEMPORARY MANAGEMENT OF ACUTE PANCREATITIS: WHAT YOU NEED TO KNOW
[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/CONTEMPORARY_MANAGEMENT_OF_ACUTE_PANCREATITIS_20.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/CONTEMPORARY_MANAGEMENT_OF_ACUTE_PANCREATITIS_20.aspx)

NO VISUAL ABSTRACT PROVIDED
OPTIMAL STRATEGIES FOR ASSESSING AND MANAGING PAIN, AGITATION AND DELIRIUM (PAD) IN THE CRITICALLY ILL SURGICAL PATIENT: WHAT YOU NEED TO KNOW
[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/OPTIMAL_STRATEGIES_FOR_ASSESSING_AND_MANAGING.21.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/OPTIMAL_STRATEGIES_FOR_ASSESSING_AND_MANAGING.21.aspx)

LETTER TO THE EDITOR
FACING COMPLEX COAGULATION WORLD, WE SHOULD AVOID A PEEP THROUGH A TUBE AT A LEOPARD
[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/FACING_COMPLEX_COAGULATION_WORLD,_WE_SHOULD_AVOID.23.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/FACING_COMPLEX_COAGULATION_WORLD,_WE_SHOULD_AVOID.23.aspx)

LETTER TO THE EDITOR
IS IT APPROPRIATE TO RECOMMEND PROPHYLACTIC REBOA IN PAS REFERENCE CENTERS?
[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/IS_IT_APPROPRIATE_TO_RECOMMEND_PROPHYLACTIC_REBOA.25.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/IS_IT_APPROPRIATE_TO_RECOMMEND_PROPHYLACTIC_REBOA.25.aspx)

AUTHOR'S REPLY
LOSING THE FOREST FOR THE TREES: THE COMPLEXITIES OF FIBRINOLYSIS WILL NEVER BE EXPLAINED WITH ONE VARIABLE ALONE
[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/LOSING_THE_FOREST_FOR_THE_TREES__THE_COMPLEXITIES.24.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/LOSING_THE_FOREST_FOR_THE_TREES__THE_COMPLEXITIES.24.aspx)

AUTHOR'S REPLY
AORTIC BALLOON OCCLUSION IN DISTAL ZONE 3 REDUCES BLOOD LOSS FROM OBSTETRIC HEMORRHAGE IN PLACENTA ACCRETA SPECTRUM
[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2024/01000/AORTIC_BALLOON_OCCLUSION_IN_DISTAL_ZONE_3_REDUCES.26.ASPX](https://journals.lww.com/jtrauma/fulltext/2024/01000/AORTIC_BALLOON_OCCLUSION_IN_DISTAL_ZONE_3_REDUCES.26.aspx)

