

**Patient Information**

**Patient Name:** Braun, Rupert Daniel

**DOB:** 1977-11-18

**Age:** 47

**Gender:** male

**MRN:** 00000010

**Admission ID:** 1b41534f-271a-407f-a948-22c783eb10b4

**Date of Admission:**

**Date of Discharge:**

**Address:** 082 Charles Bypass Suite 350

**City:** Monicafort

**State:** VT

**ZIP:** 59796



## Admission

### History Of Present Illness

47-year-old male presents to the ED following a fall down 15 stairs. HPI: Patient was found unresponsive at the scene after falling down approximately 15 stairs. The exact time of onset is unknown, but EMS was called immediately upon discovery. The incident occurred at the patient's home. Duration of unconsciousness is unclear. The nature of the injury is blunt trauma, likely involving multiple body systems. Aggravating factors include movement and stimulation. There are no known alleviating factors at this time. The severity is critical, given the patient's low GCS score and need for intubation. On arrival to the ED, patient's GCS was 7 (E1V1M5), indicating severe impairment of consciousness. Due to his low GCS and inability to protect his airway, the patient was intubated. Bilateral bleeding from the ears was noted, raising concern for basilar skull fracture. Review of Systems: General: Unresponsive, intubated. Respiratory: On mechanical ventilation, unable to assess spontaneous respiratory effort. Cardiovascular: Unable to obtain due to patient's condition. Musculoskeletal: Full extent of injuries unknown pending further examination and imaging. Neurological: GCS 7 on arrival, pupils equal and reactive to light, bleeding from ears bilaterally. Endocrine: Unable to assess due to patient's condition. Psychiatric: Unable to assess due to patient's condition. Patient remains critically ill, requiring full trauma evaluation and neuroimaging to assess the extent of injuries, particularly intracranial hemorrhage and cervical spine involvement.

### Assessment

#### Summary Of Findings

47-year-old male presents with severe traumatic brain injury following fall down 15 stairs. GCS 7 on arrival (E1V1M5), requiring intubation. Bilateral otorrhea suggesting basilar skull fracture. Full extent of injuries unknown pending further evaluation.

#### Differential Diagnosis

1. Severe traumatic brain injury 2. Basilar skull fracture 3. Intracranial hemorrhage (subdural, epidural, subarachnoid) 4. Cervical spine injury 5. Multisystem trauma (thoracic, abdominal, orthopedic injuries)

#### Primary Diagnosis

Severe traumatic brain injury with suspected basilar skull fracture

#### Secondary Diagnoses

1. Respiratory failure, intubated 2. Altered mental status 3. Polytrauma, extent unknown

### Plan

#### Diagnostic Plan

1. Stat head and cervical spine CT 2. CT of chest, abdomen, and pelvis 3. Complete trauma labs including CBC, CMP, coags, type and cross 4. Arterial blood gas 5. Toxicology screen 6. EKG and portable CXR

#### Therapeutic Plan

1. Continue mechanical ventilation, target PaO<sub>2</sub> >100 mmHg, PaCO<sub>2</sub> 35-40 mmHg 2. IVF resuscitation with normal saline, target MAP >80 mmHg 3. Elevate head of bed 30 degrees 4. Phenytoin 20 mg/kg IV loading dose for seizure prophylaxis 5. Mannitol 1 g/kg IV if signs of increased ICP 6. Tranexamic acid 1g IV over 10 minutes, then 1g over 8 hours

#### Patient Education And Counseling

Unable to provide at this time due to patient's condition. Family education will be crucial once they arrive.

#### Follow-Up Plan

1. Admit to Neurocritical Care Unit 2. Continuous neuromonitoring 3. Repeat neurological exams q1h 4. Consider ICP monitoring based on CT findings and clinical course

#### Disposition

Immediate transfer to Neurocritical Care Unit after initial stabilization and imaging

#### Consultations

1. Neurosurgery - emergent consult 2. Trauma surgery 3. Orthopedics 4. ENT for evaluation of otorrhea 5. Critical care for ongoing management

fall



Medical History

Past Medical History

Chronic Conditions

Hypertension (diagnosed 5 years ago, well-controlled with medication)  
Mild asthma (diagnosed in childhood, occasional use of inhaler)

Past Illnesses

Appendicitis with appendectomy (20 years ago)  
Mononucleosis (during college)  
Fractured right wrist from a sports injury (15 years ago, healed without complications)

Surgeries

Appendectomy (20 years ago)  
Arthroscopic knee surgery for meniscus tear (5 years ago)

Hospitalizations

Appendectomy (as mentioned above)  
Overnight observation for concussion after a car accident (10 years ago)

Allergies

Penicillin (mild rash)  
Seasonal pollen (hay fever symptoms)

Medications

Lisinopril 10mg daily (for hypertension)  
Albuterol inhaler (as needed for asthma)  
Multivitamin daily

Family History

Father	Type 2 diabetes, diagnosed at age 60
Mother	Breast cancer survivor, diagnosed at age 55
Siblings	Brother with hypertension

Social History

Occupation	Construction site manager
Marital Status	Married
Children	Two sons, ages 12 and 15
Smoking	Former smoker, quit 8 years ago
Alcohol	Social drinker, 2-3 beers on weekends
Exercise	Regular gym attendance 3 times a week, plays recreational basketball

Preventive Care

Last Physical	Annual check-up 6 months ago, all results within normal limits
Last Colonoscopy	Not yet performed, scheduled for next year (age 48)
Vaccinations	Up to date, including annual flu shots and COVID-19 vaccination
Last Eye Exam	1 year ago, no significant changes in vision



Physical Examination

General Appearance

47-year-old male, intubated, unresponsive, with visible trauma to head and face. Multiple contusions and abrasions noted.

Vital Signs

Blood Pressure	145/92 mmHg
Heart Rate	110 bpm
Respiratory Rate	16 breaths/min (ventilator-controlled)
Temperature	36.8°C
Oxygen Saturation	99% on mechanical ventilation

Heent

Scalp hematoma noted. Bilateral periorbital ecchymosis. Otorrhea and hemotympanum bilaterally. Pupils equal and reactive to light. Unable to assess extraocular movements. Oropharynx not visualized due to ETT.

Cardiovascular

Tachycardic, regular rhythm. No murmurs, rubs, or gallops appreciated. Peripheral pulses 2+ and symmetric.

Respiratory

On mechanical ventilation. Chest rise symmetric. Breath sounds clear and equal bilaterally.

Abdomen

Soft, non-distended. Unable to assess tenderness due to patient's condition. No visible bruising or external trauma.

Musculoskeletal

Multiple contusions on extremities. No gross deformities noted. Full passive ROM of all extremities without crepitus.

Neurological

GCS 7 (E1V1M5). Pupils PERRL. Unable to assess cranial nerves fully. Withdraws all extremities to painful stimuli.

Skin

Multiple abrasions and contusions, particularly on face and extremities. No open wounds noted.

Progress Notes

Progress Notes

Date

2023-05-01

Time

08:30

Patient Identification

Name

John Doe

Date Of Birth

1976-05-01

Medical Record Number

MRN123456

Subjective

47-year-old male brought to ED unresponsive after falling down approximately 15 stairs at home. Duration of unconsciousness unknown. On arrival, GCS 7 (E1V1M5). Bilateral bleeding from ears noted.

Objective

Vital Signs

Blood Pressure

145/92 mmHg

Generated by Cynthia, a synthetic data generator - learn more at [www.bacclabs.io](http://www.bacclabs.io)



Heart Rate

110 bpm

Respiratory Rate

16 breaths/min (ventilator-controlled)

Temperature

36.8°C

Oxygen Saturation

99% on mechanical ventilation

Physical Exam

Intubated, unresponsive. Multiple contusions and abrasions on head, face, and extremities. Scalp hematoma, bilateral periorbital ecchymosis. Otorrhea and hemotympanum bilaterally. Pupils equal and reactive to light. Chest rise symmetric, breath sounds clear bilaterally. Abdomen soft, non-distended. Withdraws all extremities to painful stimuli.

Imaging

CT head, cervical spine, chest, abdomen, and pelvis pending.

Assessment

Severe traumatic brain injury with suspected basilar skull fracture, status post fall. Multiple system trauma.

Plan

- Admit to Neurocritical Care Unit
- Continue mechanical ventilation
- Neurological checks q1h
- ICP monitoring to be placed after CT head
- Maintain MAP > 80 mmHg
- Neurosurgery and Trauma Surgery consults
- Repeat CT head in 6 hours
- Seizure prophylaxis with Levetiracetam
- DVT prophylaxis with pneumatic compression devices
- Family meeting to discuss prognosis and goals of care

Date

2023-05-02

Time

09:00

Patient Identification

Name

John Doe

Date Of Birth

1976-05-01

Medical Record Number

MRN123456

Subjective

Patient remains intubated and sedated. No spontaneous movements observed.

Objective

Vital Signs

Blood Pressure

132/78 mmHg

Heart Rate

88 bpm

Respiratory Rate

14 breaths/min (ventilator-controlled)

Temperature

37.2°C



Oxygen Saturation

100% on mechanical ventilation

Intracranial Pressure

15 mmHg

Physical Exam

No change in neurological status. GCS remains 3T. Pupils equal and reactive. No new findings on systemic examination.

Labs

Na 138, K 4.2, Cl 104, HCO3 24, BUN 18, Cr 0.9, Glucose 110, WBC 12.5, Hgb 11.8, Plt 180

Imaging

Repeat CT head shows stable diffuse axonal injury, no new hemorrhage.

Assessment

Day 2 of severe traumatic brain injury. Hemodynamically stable. ICP controlled.

Plan

- Continue current management in Neurocritical Care Unit
- Maintain ICP < 20 mmHg and CPP > 60 mmHg
- Initiate enteral nutrition via NG tube
- Continue seizure prophylaxis and DVT prophylaxis
- Physical therapy and occupational therapy consults for early mobilization
- Respiratory therapy for pulmonary hygiene
- Daily spontaneous breathing trials
- Neurosurgery to follow

Date

2023-05-03

Time

08:45

Patient Identification

Name

John Doe

Date Of Birth

1976-05-01

Medical Record Number

MRN123456

Subjective

Patient opened eyes spontaneously during morning assessment. No other changes in neurological status.

Objective

Vital Signs

Blood Pressure

128/74 mmHg

Heart Rate

82 bpm

Respiratory Rate

16 breaths/min (patient-triggered)

Temperature

37.0°C

Oxygen Saturation

99% on mechanical ventilation

Intracranial Pressure

12 mmHg



Physical Exam

GCS improved to 6T (E4VTM1). Pupils equal and reactive. Minimal withdrawal to painful stimuli in all extremities. No signs of infection at surgical sites.

Labs

Na 140, K 4.0, Cl 106, HCO3 25, BUN 16, Cr 0.8, Glucose 105, WBC 10.2, Hgb 11.5, Plt 195

Ventilator Settings

AC mode, FiO2 40%, PEEP 5, RR 12

Assessment

Day 3 of severe traumatic brain injury. Slight improvement in neurological status. Hemodynamically stable with controlled ICP.

Plan

- Continue current management in Neurocritical Care Unit
- Gradual decrease in sedation to further assess neurological status
- Consider tracheostomy if unable to extubate within next 48-72 hours
- Continue enteral nutrition, seizure prophylaxis, and DVT prophylaxis
- Advance physical therapy and occupational therapy as tolerated
- Family meeting to update on patient's condition and discuss potential long-term care needs

LABORATORY REPORTS

Report Date

2023-05-01

Report Time

06:47

Test Name

ECG

Results			
Finding			
Sinus rhythm			
Finding			
J point and ST segment elevation, possibly a normal variant			
Finding			
No previous tracing available for comparison			
Measurement	Value	Units	
Heart Rate	72	bpm	
Measurement	Value	Units	
PR Interval	192	ms	
Measurement	Value	Units	
QRS Duration	92	ms	
Measurement	Value	Units	
QT/QTc Interval	448/490	ms	

Report Date

2023-05-02

Report Time

09:00

Test Name

Basic Metabolic Panel



Results				
Test	Value	Units	Reference Range	
Sodium	138	mmol/L	135-145	
Test	Value	Units	Reference Range	
Potassium	4.2	mmol/L	3.5-5.0	
Test	Value	Units	Reference Range	
Chloride	104	mmol/L	98-107	
Test	Value	Units	Reference Range	
Bicarbonate	24	mmol/L	22-29	
Test	Value	Units	Reference Range	
BUN	18	mg/dL	7-20	
Test	Value	Units	Reference Range	
Creatinine	0.9	mg/dL	0.6-1.2	
Test	Value	Units	Reference Range	Flag
Glucose	110	mg/dL	70-100	H

Report Date

2023-05-02

Report Time

09:00

Test Name

Complete Blood Count

Results				
Test	Value	Units	Reference Range	Flag
WBC	12.5	K/uL	4.5-11.0	H
Test	Value	Units	Reference Range	Flag
Hemoglobin	11.8	g/dL	13.5-17.5	L
Test	Value	Units	Reference Range	
Platelets	180	K/uL	150-450	

Report Date

2023-05-03

Report Time

08:45

Test Name

Basic Metabolic Panel





Results				
Test	Value	Units	Reference Range	
Sodium	140	mmol/L	135-145	
Test	Value	Units	Reference Range	
Potassium	4.0	mmol/L	3.5-5.0	
Test	Value	Units	Reference Range	
Chloride	106	mmol/L	98-107	
Test	Value	Units	Reference Range	
Bicarbonate	25	mmol/L	22-29	
Test	Value	Units	Reference Range	
BUN	16	mg/dL	7-20	
Test	Value	Units	Reference Range	
Creatinine	0.8	mg/dL	0.6-1.2	
Test	Value	Units	Reference Range	Flag
Glucose	105	mg/dL	70-100	H

Report Date

2023-05-03

Report Time

08:45

Test Name

Complete Blood Count

Results				
Test	Value	Units	Reference Range	
WBC	10.2	K/uL	4.5-11.0	
Test	Value	Units	Reference Range	Flag
Hemoglobin	11.5	g/dL	13.5-17.5	L
Test	Value	Units	Reference Range	
Platelets	195	K/uL	150-450	



Discharge Summary

Patient Information

Medical Record Number

MRN123456

Reason For Admission

47-year-old male admitted for severe traumatic brain injury with suspected basilar skull fracture after falling down approximately 15 stairs at home. Patient was found unresponsive with a GCS of 7 on arrival to the ED.

Hospital Course

Patient was intubated in the ED due to low GCS and inability to protect airway. CT scans revealed bilateral longitudinal temporal bone fractures and diffuse axonal injury. Patient was admitted to the Neurocritical Care Unit for management of severe TBI. ICP monitoring was initiated, and the patient received mechanical ventilation, seizure prophylaxis, and DVT prophylaxis. Over the course of three days, the patient showed slight improvement in neurological status, with GCS improving from 3T to 6T (E4VTM1). ICP remained controlled throughout the hospital stay.

Discharge Diagnosis

- Severe traumatic brain injury
- Bilateral longitudinal temporal bone fractures
- Diffuse axonal injury
- Bilateral hemotympanum

Medications At Discharge

Name	Dosage	Route	Frequency
Levetiracetam	As prescribed	Intravenous	Twice daily

Follow Up Plans

- Follow up with Neurosurgery in 1-2 weeks
- Schedule appointment with Physical Medicine and Rehabilitation within 1 month
- Audiology assessment within 2 weeks
- Continue inpatient rehabilitation as determined by the rehabilitation team

Discharge Instructions

- Continue with prescribed medications
- Monitor for signs of increased intracranial pressure (severe headache, vomiting, decreased level of consciousness)
- Follow speech and swallowing therapy recommendations
- Adhere to physical and occupational therapy exercise regimens
- Avoid strenuous activities and follow activity restrictions as advised by the rehabilitation team
- Return to the Emergency Department if experiencing worsening neurological symptoms, fever, or signs of infection

Additional Notes

- Patient requires ongoing intensive rehabilitation
- Long-term prognosis remains guarded; family has been counseled on potential outcomes
- Consider outpatient neuropsychological evaluation once medically stable
- Hearing assessment and follow-up recommended due to temporal bone fractures
- Patient may require long-term care and support; social work has been involved for resource planning

