

**Patient Identification Label**

**Bladder Trauma Data Collection Sheet**

If there was no traumatic injury with **PENETRATION** of the bladder **DO NOT** proceed

Date of injury: \_\_\_\_/\_\_\_\_/\_\_\_\_

Time of injury:

Date of hospital arrival: \_\_\_\_/\_\_\_\_/\_\_\_\_

Time of hospital arrival:

Age:\_\_\_\_ Sex: **M F** Height: Weight: BMI:

Date of discharge:

Discharge status: **DEAD ALIVE**

ICU length of stay (if known):

Comorbidities: **Diabetes Stroke Peripheral vascular disease Cirrhosis Drug abuse**  
**Alcoholism Current smoker Hx of MI (last 6 months) Congestive heart failure**  
**COPD End stage renal disease**

Trauma type: **BLUNT PENETRATING**

Blunt: **MVC MCC Auto vs. Ped Other MVC Fall from height Bicycle (not hit by car)**  
**Sports Blunt assault Other**

Penetrating: **GSW Shot gun Stabbed Other**

Total ISS:

AAST grade kidney injury:

Which kidney: **R L Both**

Other Injuries:

Pelvis fracture: **Y N**  
Rectal: **Y N**  
Small bowel: **Y N**  
Colon: **Y N**  
Renal: **Y N AAST grade:**  
Liver: **Y N AAST grade:**  
Ureter: **Y N AAST grade:**  
Spleen: **Y N AAST grade:**  
Pancreas: **Y N AAST grade:**  
Spinal Cord: **Y N**

Major vascular: **Aorta IVC Iliac vein Iliac artery Renal artery – R L Renal vein – R L**  
**Femoral vein Femoral artery Atrium rupture**

ER disposition: **Dead Trauma ward ICU Immediate OR**

Laparotomy: Y N  
Date of 1<sup>st</sup> laparotomy: \_\_\_\_/\_\_\_\_/\_\_\_\_  
Time of 1<sup>st</sup> laparotomy:  
Was the abdomen left open: Y N  
Date of final laparotomy: \_\_\_\_/\_\_\_\_/\_\_\_\_

Thoractomy: Y N  
Date of 1<sup>st</sup> thoractomy: \_\_\_\_/\_\_\_\_/\_\_\_\_

Angiography: Y N  
Date of angiography: \_\_\_\_/\_\_\_\_/\_\_\_\_  
Time of Angiography:  
Was stenting or angioembolization done: Y N  
Embolization: **Internal iliac complete – R L** **External iliac – R L** **Branch of internal iliac – R L**  
**Renal artery complete – R L** **Renal artery selective – R L** **Perinephric artery**  
**Other**  
Stent: **Iliac artery – R L** **Renal artery – R L** **Other**

**REPEAT** Angiography: Y N  
Date of angiography: \_\_\_\_/\_\_\_\_/\_\_\_\_  
Time of Angiography:  
Was stenting or angioembolization done: Y N  
Embolization: **Internal iliac complete – R L** **External iliac – R L** **Branch of internal iliac – R L**  
**Renal artery complete – R L** **Renal artery selective – R L** **Perinephric artery**  
**Other**  
Stent: **Iliac artery – R L** **Renal artery – R L** **Other**

AAST bladder injury grade:

**AAST (OIS) I – bladder contusion (DO NOT ENTER PATIENT)**  
**AAST (OIS) II – Extraperitoneal < 2 cm**  
**AAST (OIS) III – Extraperitoneal > 2 cm or intraperitoneal < 2 cm**  
**AAST (OIS) IV – Intraperitoneal > 2 cm**  
**AAST (OIS) V – Massive avulsion, involvement - ureter, trigone, bladder neck**

Bladder injury specifics:

Involvement: **Bladder neck** **Urethra** **Ureteral – R L**

What was the management in the first 4 days after injury: **Conservative** **Operative**

**Did the patient have bladder injury repair: Y N**

Date of repair: \_\_\_\_/\_\_\_\_/\_\_\_\_

Time of repair:

Who did repair: **General surgery** **Acute (trauma) surgery** **Urology**

Orthopedic procedures:

Date of ortho procedure: \_\_\_\_/\_\_\_\_/\_\_\_\_

Procedure:

Date of ortho procedure: \_\_\_\_/\_\_\_\_/\_\_\_\_

Procedure:

Date of ortho procedure: \_\_\_\_/\_\_\_\_/\_\_\_\_

Procedure:

Date of ortho procedure: \_\_\_\_/\_\_\_\_/\_\_\_\_

Procedure:

Date of ortho procedure: \_\_\_\_/\_\_\_\_/\_\_\_\_

Procedure:

Date of ortho procedure: \_\_\_\_/\_\_\_\_/\_\_\_\_

Procedure:

Type of bladder injury:

**Intraperitoneal**

**Extraperitoneal**

**Both intraperitoneal and extraperitoneal**

**Unknown**

How was the initial diagnosis of bladder injury made?

**Intraoperatively in first 24 hours**

**CT trauma without dedicated cystogram phase**

**CT cystogram**

**Cystogram plain**

**Cystoscopy**

**Other**

What was the reason the bladder was repaired in the first 4 days:

**Intraperitoneal injury**

**Discovered during laparotomy and repaired**

**Urine was not draining well**

**Hematuria and blood clots were blocking catheter**

**Repaired at the time of pelvic fixation to prevent contamination of pelvic hardware**

**Concomitant rectal or bowel injury**

**Other**

Did conservative therapy fail if it was tried for > 4 days? **Y** **N**

Were follow up X-rays done to check if the bladder injury had healed? **Y** **N**

X-rays follow up: **CT cystogram** **Cystogram** **Cystoscopy** **Ultrasound** **None performed at facility** **None documented** **Other**

Was there persistent urine leak: **Y** **N**

What was done to treat persistent leak: **Bladder repair** **Continued catheter** **Urinary diversion**  
**Other**

Were **ADDITIONAL** X-rays done to check if the bladder injury had healed? **Y** **N**

X-rays follow up: **CT cystogram** **Cystogram** **Cystoscopy** **Ultrasound** **None performed at facility** **None documented** **Other**

Was there persistent urine leak: **Y** **N**

What was done to treat persistent leak: **Bladder repair** **Continued catheter** **Urinary diversion**  
**Other**

Date of removal of Foley catheter: \_\_\_\_/\_\_\_\_/\_\_\_\_

Was a suprapubic tube maintained: **Y** **N** **Unknown**

Was a bladder repair done initially or subsequently: **Y** **N**

Date of bladder repair: \_\_\_\_/\_\_\_\_/\_\_\_\_

Check all that apply:

**Suprapubic tube left**

**Single layer closure of bladder**

**Double layer closure of bladder**

**Coverage with flap: Peritoneal      Omental      Gracilis muscle      Rectus muscle**

**Intraperitoneal injury**

**Extraperitoneal injury**

**Bladder neck injury**

**Prostate injury**

**Concomitant ureteral injury**

Was **ANOTHER** bladder repair needed: **Y**      **N**

Date of additional bladder repair: \_\_\_\_/\_\_\_\_/\_\_\_\_

Check all that apply:

**Suprapubic tube left**

**Single layer closure of bladder**

**Double layer closure of bladder**

**Coverage with flap: Peritoneal      Omental      Gracilis muscle      Rectus muscle**

**Intraperitoneal injury**

**Extraperitoneal injury**

**Bladder neck injury**

**Prostate injury**

**Concomitant ureteral injury**

Was there a urinary tract related complication: **Y**      **N**

Date of urinary tract complication: \_\_\_\_/\_\_\_\_/\_\_\_\_

When did the complication occur: **Initial hospitalization**      **During readmission**      **Managed outpatient**

Date of readmission for urinary tract complication: \_\_\_\_/\_\_\_\_/\_\_\_\_

Complications:

**UTI**

**Pyelonephritis or urosepsis**

**Peri-renal abscess**

**Urinoma**

**Persistent urinary extravasation**

**Renal failure**

**Soft tissue infection: Groin      Perineum      Pelvis      Lower abdomen**

**Obstruction of catheter from blood clots or other**

**Urinary fistula: Bowel      Skin, flank, abdominal wall      Other**

**Urethral stenosis**

**Incontinence**

**Neurogenic bladder**

**Other**

Was there pelvic fracture complications: **Y**      **N**

Complications: **Nonunion**      **Pelvic hardware infection**      **Pelvic osteomyelitis**      **Other**

Management of complication:

**Bladder repair**

**Pelvic washout**

**Removal of pelvic hardware**

**IV antibiotics > 1 week**

**Routine oral antibiotics or IV < 1 week**

**Dialysis**

**Urethroplasty**

**Soft tissue debridement**

**Percutaneous drain**

**Urinary diversion surgery**

**Continued catheter (Foley or suprapubic)**

**Other**