



BMC2 Endovascular aneurysm Repair (EVAR) Worksheet

Procedure Information

Procedure # _____ **Physician** _____ **Fellow ID/Second Operator** _____
Procedure Date _____ **Start Time** _____ **Procedure End Date** _____ **End Time** _____
Status of Procedure ☐ Elective ☐ Urgent ☐ Emergent

Imaging Studies

RT Pre-Procedure ABI Y / N **Compressible** Y / N **Value** _____

LT Pre-Procedure ABI Y / N **Compressible** Y / N **Value** _____

RT Pre-Procedure TBI Y / N **Value** _____

LT Pre-Procedure TBI Y / N **Value** _____

RT Pre Procedure Toe Pressure Y / N **Value** _____

LT Pre Procedure Toe Pressure Y / N **Value** _____

Duplex Ultrasound Y / N Nml / Abn

CTA Y / N Nml / Abn

MRI/MRA Y / N Nml / Abn

Contrast Cineangiography Y / N Nml / Abn

Cardiac Stress Test Y / N Nml / Abn

Electrocardiogram Y / N Nml / Abn

Chest X-ray Y / N Nml / Abn

Meds During Procedure

Aspirin (PRE) Procedure G NG C/I

Clopidogrel (Plavix) (PRE) Procedure G NG C/I

Prasugrel (Effient) (PRE) Procedure G NG C/I

Ticagrelor (Brilinta) (PRE) Procedure G NG C/I

IV Nitroglycerin (DURING) Procedure G NG

IV Heparin/Unfractionated Heparin Pre During Post NG

Total Heparin Dosage (units) ND

Protamine (DURING) Procedure G NG

Thrombolytics Pre During Post NG

Labs Pre Procedure

Creatinine _____ mg/dl ND

Hemoglobin _____ g/dl ND

BNP _____ pg/mL No

Troponin Y / ND

I _____ **Units** _____ No

T _____ **Units** _____ No

I HS _____ **Units** _____ No

T HS _____ **Units** _____ No

Labs Post Procedure

Peak Creatinine _____ mg/dl ND

Nadir Hemoglobin _____ g/dl ND

Labs Other

Albumin _____ g/dl ND

Infusions During Procedure	Pre	During	Post
Sodium Bicarb Infusion			
Saline <1 hr			
Saline 1-3 hrs			
Saline 3-6 hrs			
Saline >6 hrs			
LR <1 hr			
LR 1-3 hrs			
LR 3-6 hrs			
LR >6 hrs			
Other <1 hr			
Other 1-3 hrs			
Other 3-6 hrs			
Other >6 hrs			
Crystalloids (mL)			ND

Indications

Asymptomatic Y / N

Abdominal / Back Pain Y / N

Rapidly Increasing Aneurysm Dia Y / N

Unfit for Open AAA Repair Y / N

Unfit for General Anesthesia Y / N

Infection Y / N

Size of Iliac Aneurysm Y / N

Correction of Endoleak Y / N

Concomitant Iliac occlusive disease Y / N

Lower Extremity Ischemia / Emboli Y / N

Documented Patient Anxiety Levels Y / N

Penetrating Ulcer Y / N **Value** _____ **ND**

Complication from Prior Procedure Y / N

Trauma Y / N

Mycotic Aneurysm Y / N



Procedure Details

Prior Family History of AAA Y / N

Prior Aortic Surgery Y / N

- Year _____
- AAA (Infrarenal)
- SAAA (Suprarenal)
- Bypass
- Other (Endarterectomy or Other)

Max AAA Dia _____mm ND

Iliac Aneurysm Y / N

- Unilateral
- Bilateral
- _____Mm

Aneurysm Location

- Infrarenal
- Juxtarenal
- Suprarenal
- ND

Aneurysm Anatomy

- Fusiform
- Saccular
- Both
- ND

Contained Rupture Y / N

Infrarenal Neck Dia _____mm

Infrarenal Neck Length _____mm

Ruptured AAA Y* / N

***Lowest Pre-Intub BP** _____mmHg ND

*Mental Status

- Normal (alert and oriented)
- Disoriented to person, place or time
- Unconscious

***Cardiac Arrest** Y / N

***Timeframe Sxs to Incision** _____hrs ND

***Timeframe Admit to Incision** _____hrs

- ND

***Abdomen Explored** Y / N

Procedure Aborted Y / N

Graft Body Diameter _____mm

- ND
- Graft Not Utilized

RT Distal Seal Zone Dia _____mm / No

LT Distal Seal Zone Dia _____mm / No

Graft Type (Brand Name) _____

- Other
- Graft Not Utilized

Graft Configuration

- Aorto-bi-iliac
- Aorto-uni-iliac RT
- Aorto-uni-iliac LT
- Aorto-aortic
- Fenestrated
- Graft Not Utilized

Additional Graft Components Y / N

- ☐ Aortic Cuff
- ☐ Aortic Screws
- ☐ RT Iliac branch device
 - Distal hypogastric dia _____mm ND
 - Distal external iliac dia _____mm ND
- ☐ LT Iliac branch device
 - Distal hypogastric dia _____mm ND
 - Distal external iliac dia _____mm ND
- ☐ Additional main body
- ☐ Other

Renal Status Y / N / ND

- ☐ Patent, No Intervention
- ☐ Chronically Occluded
- ☐ Purposely Occluded
- ☐ De-Branch / Bypass
- ☐ Stent
- ☐ Chimney
- ☐ Fenestrated / scallop
- ☐ Side Branch from Graft
- ☐ Accessory Renal Artery Covered

Hypogastric Coiled / Plugged Y / N

- Coiled Pre-op
- Coiled Intra-op
- Unilateral
- Bilateral

Hypogastric Intentionally covered

Y / N / Graft Not Utilized

- Unilateral
- Bilateral

Hypogastric Unintentionally covered

Y / N / Graft Not Utilized

- Unilateral
- Bilateral

Arterial Injury Y / N

- Femoral
- Iliac
- Renal
- Aorta
- Multiple

*Record intervention performed to resolve injury.

- Stent/PTA
- Stent/Graft
- Open Repair
- ND

Intra-Op Revision Needed Y / N

Endoleak at Completion Y / N

- Attachment site (Type I)
- Branch (Type II)
- Mid Graft (Type III)
- Indeterminate

Closure for Groin Access

○ Percutaneous Access

- ☐ Manual
- ☐ Perclose
- ☐ Angioseal
- ☐ Mynx
- ☐ Starclose
- ☐ Exoseal
- ☐ Compression Device
- ☐ Other VCD

○ Open Cutdown

- ☐ Suture
 - ☐ Absorbable
 - ☐ Permanent
 - ☐ ND
- ☐ Staples
- ☐ Skin glue
- ☐ Other

Initial Placement of Wound Vac in OR

- Yes
 - Incisional Wound Vac
 - Traditional Wound Vac
- No

Additional Planned Procedures Y / N

- ☐ Femoral Endarterectomy
- ☐ Thromboembolectomy
- ☐ Other Arterial Reconstruction

Conversion to Open Y / N

- Unable to deploy appropriately
- Endoleak

Anesthesia Type

- Local
- Epidural
- Regional
- Spinal
- General
- Epidural + General
- MAC

Antibiotics Pre Procedure Y / N

- Cefazolin
 - Redosed (Q4 hours) Y / N
- Clindamycin
 - Redosed (Q6 hours) Y / N
- On scheduled antibiotic
- Other

Skin Prep

- Iodine
- Chlorhexidine + Iodine
- Chlorhexidine + Alcohol
- Iodine + Alcohol

C/I to Chlorhexidine &

Alcohol Skin Prep Y / N

Glucose Peak _____mg/dL ND

Nadir Body Temp _____Celsius ND

EBL _____mL ND



Procedure Details (cont.) ASA Class _____ Does not apply Fluoro time _____ Air Kerma _____ ND ○ mGy ○ Gy KAP _____ ND ○ Gy.cm2 ○ dGy.cm2 ○ cGy.cm2 ○ mGy.cm2 ○ μGy.M2	Contrast Types Y / None ☐ Nonionic, low-osmolar ☐ Nonionic, Iso-osmolar ☐ Ionic, hyperosmolar ☐ Ionic, low-osmolar ☐ Investigational ☐ Gadolinium ☐ Carbon Dioxide (CO ₂) ☐ Unknown	Total IV Contrast Used _____ mL ND Peak Intra-Op ACT _____ Sec ND End of Procedure ACT _____ Sec ND
Outcomes During Procedure Y / N Death Y / N ○ Cardiovascular ○ Hemorrhage ○ Multi System Organ Failure ○ Other (neuro, renal, liver, GI, CA) ○ Unknown Cause of Death Dissection (Not Repaired) Y / N Myocardial Infarction Y / N Cardiac Arrest Y / N Embolus Y / N ○ Successful ○ Unsuccessful Thrombus Y / N Stent/Graft Thrombosis Y / N ○ Successful ○ Unsuccessful	Vessel Perforation Y / No Tx ○ Successful ☐ Balloon ☐ Covered Stent ☐ Bare Metal Stent ☐ External Compression ☐ Reversal of Anticoagulation ○ Unsuccessful TIA/Stroke Y / N Transfusion Y / N ☐ PRBC #Units _____ ☐ Platelets ☐ FFP ☐ Other	Vascular Access Complications Y / N ☐ Retroperitoneal hematoma ☐ Pseudo-aneurysm ☐ Hematoma at access site ☐ Bleeding at access site ☐ AV fistula ☐ Acute Thrombosis ☐ Surgical repair of the vascular access site ☐ Other Amputation Y / N LT RT Hip disarticulation AKA BKA Foot Metatarsal Digit Compartment Syndrome Y / N
Outcomes Post Procedure Y / N Death Y / N ○ Cardiovascular ○ Hemorrhage ○ Multi System Organ Failure ○ Other (neuro, renal, liver, GI, CA) ○ Unknown of death Comfort Care Y / N Date _____ Stay in ICU Y / N _____ #days Vasopressors Post-Op Y / N Respiratory Y / No ☐ Ventilator (cont. after leaving OR) ☐ Reintubation (after initial extub) Myocardial Injury Y / N Date _____ ○ Acute Myocardial Injury ○ Type 2 Myocardial Infarction ○ Type 1 NSTEMI ○ STEMI ○ ND	Peak post-op troponin Y / ND I _____ Units _____ No T _____ Units _____ No I HS _____ Units _____ No T HS _____ Units _____ No Dysrhythmia Y / N Date _____ CHF Y / N Date _____ TIA/Stroke Y / N Date _____ Infection/Sepsis Y / N Date _____ ☐ Access site ☐ Central line/IV ☐ Blood ☐ Graft infection ☐ Pulmonary ☐ UTI ☐ Wound site ☐ Unknown New Req for Dialysis Y / N Date _____	Transfusion Y / N ☐ PRBC #Units _____ ○ Date _____ ○ Hgb prior to txf Y/N/ND ○ Hgb value _____ mg/dL ○ Symptomatic prior to txf Y/N ☐ Angina ☐ Hypotension ☐ Tachycardia ☐ EKG Changes ☐ Shortness of Air ☐ Bleeding ☐ Cancer/Chronic Anemia ☐ Platelets ☐ FFP ☐ Other Vascular Access Complications Y / N ☐ Retroperitoneal hematoma ☐ Pseudo-aneurysm ☐ Hematoma at access site ☐ Bleeding at access site ☐ AV fistula ☐ Acute thrombosis ☐ Surgical repair of the vascular access site ☐ Other



Outcomes Post Procedure (cont.)

Return to OR Y / N

- ☐ **Amputation**
 - ☐ Date_____
 - ☐ Planned
 - ☐ Unplanned
 - ☐ Amputation Point_____
- ☐ **Bleeding**
 - ☐ Date_____
- ☐ **Compartment Syndrome**
 - ☐ Date_____
- ☐ **Embolus**
 - ☐ Date_____
 - ☐ Successful
 - ☐ Unsuccessful
- ☐ **Endoleak**
 - ☐ Date_____
- ☐ **Graft Revision**
 - ☐ Date_____
- ☐ **Infection**
 - ☐ Date_____
- ☐ **Other**
 - ☐ Date_____
- ☐ **Renal Ischemia**
 - ☐ Date_____
- ☐ **Stent/Graft Thrombosis**
 - ☐ Date_____
 - ☐ Successful
 - ☐ Unsuccessful
- ☐ **Thrombus**
 - ☐ Date_____
 - ☐ Successful
 - ☐ Unsuccessful

Bowel Ischemia Y / N Date_____

- ☐ Medical Treatment
- ☐ Surgical Treatment

Reasons for LOS >2 days after EVAR

(Elective EVAR only)

- ☐ Hypertension
- ☐ Lack of transportation
- ☐ No caregiver/support at home
- ☐ COPD
- ☐ Urinary retention
- ☐ Placement to another facility
- ☐ EVAR & another surg proc, same DC
- ☐ Persistent hypotension
- ☐ FEVAR
- ☐ Other

Locations

Vessel Location _____

Lesion Segment Area

- ☐ Proximal
- ☐ Mid
- ☐ Distal
- ☐ Diffuse
- ☐ ND

Vessel Location _____

Lesion Segment Area

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- ☐ Mid
- ☐ Distal
- ☐ Diffuse
- ☐ ND

Vessel Location _____

Lesion Segment Area

- ☐ Proximal
- ☐ Mid
- ☐ Distal
- ☐ Diffuse
- ☐ ND

PVI Procedure Performed

- | | |
|-------------------------------------|--------------------------------------|
| ☐ Asp-Ather | ☐ Lys |
| ☐ M-Throm | ☐ ND |
| ☐ BA | ☐ NW |
| ☐ Cryo-B | ☐ Oth-Ather |
| ☐ CTO Device | ☐ Open Endart |
| ☐ CB | ☐ Open Thromb |
| ☐ D-Ather | ☐ R-Ather |
| ☐ DPD-B | ☐ Re-Ent-Cath |
| ☐ DPD-F | ☐ Research |
| ☐ DCB | ☐ S-BA |
| ☐ FW | ☐ Stent |
| ☐ Inf-Cath | ☐ Thromb-Asp |
| ☐ IVUS | ☐ Vasc Emb |
| ☐ L-Ather | |

PVI Procedure Performed

- | | |
|-------------------------------------|--------------------------------------|
| ☐ Asp-Ather | ☐ Lys |
| ☐ M-Throm | ☐ ND |
| ☐ BA | ☐ NW |
| ☐ Cryo-B | ☐ Oth-Ather |
| ☐ CTO Device | ☐ Open Endart |
| ☐ CB | ☐ Open Thromb |
| ☐ D-Ather | ☐ R-Ather |
| ☐ DPD-B | ☐ Re-Ent-Cath |
| ☐ DPD-F | ☐ Research |
| ☐ DCB | ☐ S-BA |
| ☐ FW | ☐ Stent |
| ☐ Inf-Cath | ☐ Thromb-Asp |
| ☐ IVUS | ☐ Vasc Emb |
| ☐ L-Ather | |

PVI Procedure Performed

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| ☐ Inf-Cath | ☐ Thromb-Asp |
| ☐ IVUS | ☐ Vasc Emb |
| ☐ L-Ather | |

Bypass Graft Y / N
Type

Bypass Graft Y / N
Type

Bypass Graft Y / N
Type



- ☐ Synthetic
- ☐ Vein
- ☐ ND

Graft Origin _____

Graft Insertion _____

Lesion Length _____ mm

Heavy Calcium Y / N

In-stent restenosis Y / N

Thrombus Y / N

Pre/Post stenosis _____ / _____ %

Final balloon dia _____ mm

Stents

Stent Name _____

Stent Dia _____ mm

Stent Length _____ mm

- ☐ Synthetic
- ☐ Vein
- ☐ ND

Graft Origin _____

Graft Insertion _____

Lesion Length _____ mm

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Thrombus Y / N

Pre/Post stenosis _____ / _____ %

Final balloon dia _____ mm

Stent Name _____

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Stent Length _____ mm

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- ☐ ND

Graft Origin _____

Graft Insertion _____

Lesion Length _____ mm

Heavy Calcium Y / N

In-stent restenosis Y / N

Thrombus Y / N

Pre/Post stenosis _____ / _____ %

Final balloon dia _____ mm

Stent Name _____

Stent Dia _____ mm

Stent Length _____ mm

Vascular Access

Vascular Access Site _____

Vascular Access Type

- ☐ Percutaneous
- ☐ Surgical Cut down

Vessel Accessed

- ☐ Native Artery
- ☐ Bypass Graft

Access Guidance Y / N

- ☐ Fluoroscopy
- ☐ Ultrasound

Access Approach

- ☐ Antegrade
- ☐ Retrograde
- ☐ Both

Sheath Size _____ FR

Sheath Removed Y / N

- | | |
|---|---|
| ☐ Manual (No device) | ☐ Exoseal |
| ☐ Perclose | ☐ Compression Device |
| ☐ Angioseal | ☐ Boomerang |
| ☐ Mynx | ☐ Hemostatic Patch |
| ☐ Starclose | ☐ FISH |
| ☐ Surgical | ☐ Vascade |

Sheath removal

- ☐ 0-3 hours
- ☐ 3-24 hours
- ☐ >24 hours

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Sheath Size _____ FR

Sheath Removed Y / N

- | | |
|---|---|
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| ☐ Perclose | ☐ Compression Device |
| ☐ Angio seal | ☐ Boomerang |
| ☐ Mynx | ☐ Hemostatic Patch |
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