

Neurologic Injury after Non-Supine Shoulder Surgery Report Form

Case Report ID:

PART 1

PATIENT INFORMATION

1.1 Age (Years) _____

1.2 Height _____ inches

1.3 Sex Male
 Female

1.4 Weight _____ lbs. or _____ kgs.

1.5 Was patient obese?
 No
 Yes
 Unknown

1.6 ASA physical status ① ② ③ ④ ⑤ Unknown

Patient Medical History and Underlying Disease Status

1.7 Diabetes No
 Yes →

Insulin Dependent ?	<input type="radio"/> No
	<input type="radio"/> Yes

 Unknown

1.8 Smoking No
 Yes →

Pack Years	_____
Last Smoked	____ / ____
	Month/ Year

 Unknown

1.9 Hypertension
 No
 Yes →

Treatment	<input type="radio"/> None
	<input type="radio"/> Medical Treatment
Control of BP	<input type="radio"/> Uncontrolled (<i>no treatment or no response to treatment</i>)
	<input type="radio"/> Moderate Control (<i>responded to treatment but target BP not attained</i>)
	<input type="radio"/> Good Control (<i>normal BP with treatment</i>)

 Unknown

1.10 Coronary artery disease None
 Mild
 Severe
 Unknown } →

Revascularized?	<input type="radio"/> No
	<input type="radio"/> PTCA
	<input type="radio"/> CABG

1.11 Previous MI
 No
 Yes →

Date (most recent)	_____

 Unknown

1.12 Dysautonomia Yes No Unknown

1.13 Orthostatic hypotension Yes No Unknown

1.14 Peripheral vascular disease Yes No Unknown

1.15 History of carotid endarterectomy Yes No Unknown

1.16 Previous CVA/stroke Yes No Unknown

1.17 TIA Yes No Unknown

1.18 Symptomatic carotid artery disease Yes No Unknown

1.19 Hyperlipidemia Yes No Unknown

1.20 Valvular heart disease Yes No Unknown

1.21 Atrial fibrillation/flutter Yes No Unknown

1.22 Congestive heart failure Yes No Unknown

1.23 Patent foramen ovale Yes No Unknown

1.24 Other pre-existing neurologic disease Yes No Unknown

Preexisting spinal disease No Yes➔(specify type & spine location)_____

Documented cognitive deficits No Yes➔(specify type)_____

Documented motor deficits No Yes➔(specify type)_____

Prior traumatic brain injury No Yes➔(specify type)_____

Parkinson's Disease No Yes

Other neurologic disease No Yes➔(specify type)_____

1.25 Specify any other significant medical history: _____

1.26 Current medications:

- Beta blockers
- Calcium channel blockers
- ACE inhibitors or angiotensin II receptor antagonists
- Nitrate/nitroglycerin
- Medications for Parkinson's Disease
- Diuretics
- Other medications (List all other medications) _____

1.27 Previous surgeries: _____

1.28 Preoperative hematocrit _____



2.10 List ALL drugs administered during induction and maintenance of anesthesia (including inhalation agents) or for maintenance of sedation.

Premedication		Drug	Dose	Premedication		Drug	Dose
Midazolam	<input type="radio"/>	_____		Clonidine	<input type="radio"/>	_____	
Fentanyl	<input type="radio"/>	_____		Other (specify) _____	<input type="radio"/>	_____	
Propofol	<input type="radio"/>	_____		Unknown	<input type="radio"/>	_____	

Inhalation Agents	Used for maintenance	If available, range of ET concentration	If ET not available, range of inspired concentration
Desflurane	<input type="radio"/>	<input type="radio"/> _____	<input type="radio"/> _____
Enflurane	<input type="radio"/>	<input type="radio"/> _____	<input type="radio"/> _____
Halothane	<input type="radio"/>	<input type="radio"/> _____	<input type="radio"/> _____
Isoflurane	<input type="radio"/>	<input type="radio"/> _____	<input type="radio"/> _____
Nitrous oxide	<input type="radio"/>	<input type="radio"/> _____	<input type="radio"/> _____
Sevoflurane	<input type="radio"/>	<input type="radio"/> _____	<input type="radio"/> _____
Other (specify) _____	<input type="radio"/>	<input type="radio"/> _____	<input type="radio"/> _____
Unknown	<input type="radio"/>		

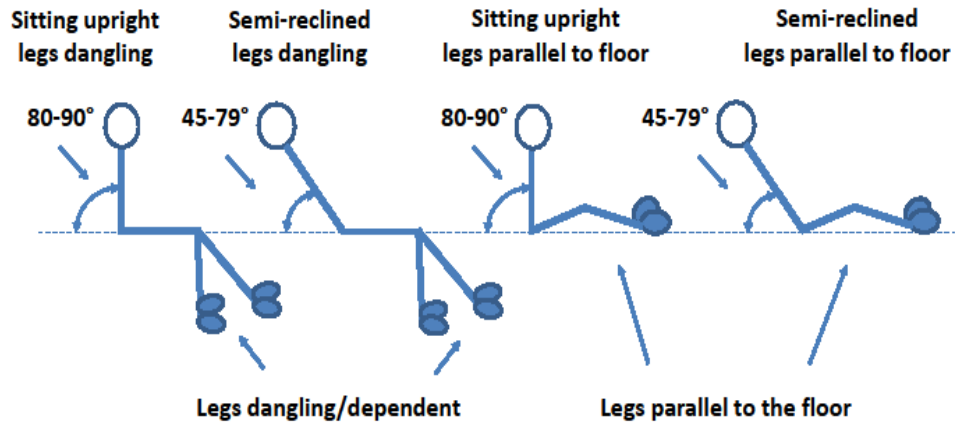
Opioids	Maintenance		Maintenance		Other Anesthetic Agents	Maintenance	
	Bolus	Dose	Infusion	Dose		Infusion	Dose
Fentanyl	<input type="radio"/>	_____	<input type="radio"/>	_____	Propofol	<input type="radio"/>	_____
Sufentanil	<input type="radio"/>	_____	<input type="radio"/>	_____	Ketamine	<input type="radio"/>	_____
Morphine sulfate	<input type="radio"/>	_____	<input type="radio"/>	_____	Etomidate	<input type="radio"/>	_____
Remifentanil	<input type="radio"/>	_____	<input type="radio"/>	_____	Dexmedetomidine	<input type="radio"/>	_____
Hydromorphone	<input type="radio"/>	_____	<input type="radio"/>	_____	Other (specify) _____	<input type="radio"/>	_____
Other (specify) _____	<input type="radio"/>	_____	<input type="radio"/>	_____	Unknown	<input type="radio"/>	_____
Unknown	<input type="radio"/>		<input type="radio"/>				

Vasopressors	Maintenance		Maintenance	
	Bolus	Dose	Infusion	Dose
Dopamine	<input type="radio"/>	_____	<input type="radio"/>	_____
Ephedrine	<input type="radio"/>	_____	<input type="radio"/>	_____
Epinephrine	<input type="radio"/>	_____	<input type="radio"/>	_____
Phenylephrine	<input type="radio"/>	_____	<input type="radio"/>	_____
Vasopressin	<input type="radio"/>	_____	<input type="radio"/>	_____
Norepinephrine	<input type="radio"/>	_____	<input type="radio"/>	_____
Other (specify) _____	<input type="radio"/>	_____	<input type="radio"/>	_____
Unknown	<input type="radio"/>		<input type="radio"/>	

Other Vasoactive Agents (specify agent)	Induction		Maintenance		Maintenance	
	Bolus	Dose	Bolus	Dose	Infusion	Dose
Beta blockers _____	<input type="radio"/>	_____	<input type="radio"/>	_____	<input type="radio"/>	_____
Calcium channel blockers _____	<input type="radio"/>	_____	<input type="radio"/>	_____	<input type="radio"/>	_____
Nitroprusside _____	<input type="radio"/>	_____	<input type="radio"/>	_____	<input type="radio"/>	_____
Nitroglycerin _____	<input type="radio"/>	_____	<input type="radio"/>	_____	<input type="radio"/>	_____
Diuretics _____	<input type="radio"/>	_____	<input type="radio"/>	_____	<input type="radio"/>	_____
Clonidine _____	<input type="radio"/>	_____	<input type="radio"/>	_____	<input type="radio"/>	_____
Other _____	<input type="radio"/>	_____	<input type="radio"/>	_____	<input type="radio"/>	_____

3.1 What was the estimated position of the patient during surgery?

- Sitting upright with legs dangling or dependent (See drawing below)
- Semi-reclined with legs dangling or dependent (See drawing below)
- Sitting upright with legs parallel to floor (See drawing below)
- Semi-reclined with legs parallel to floor (See drawing below)
- Beach chair with angles unknown
- Lateral decubitus



3.2 What was the approximate angle of the back of the table to the floor? _____degrees Unknown

3.3 What was the approximate vertical distance from the heart level to the external auditory canal?
 _____inches Unknown

3.4 Was the patient's head rotated from the neutral position during surgery? Yes No Unknown

If rotated, how many degrees from the neutral position? _____degrees Unknown

If rotated, what direction was the head rotated? Left Right Unknown

3.5 Was the patient's neck flexed or extended from the neutral position during surgery?
 No Flexed Extended Unknown

If neck was flexed or extended, approximately how many degrees? _____ Unknown

4.1 Preoperative blood pressure

Clinic Reading: SBP____mm Hg DBP____mm Hg Position: Sitting Supine Unknown

Day of surgery (prior to premedication): SBP____mm Hg DBP____mm Hg Position: Sitting Supine Unknown

1st reading in OR prior to induction: SBP____mm Hg DBP____mm Hg Position: Sitting Supine Unknown

Was premedication given prior to 1st reading in the OR? Yes No Unknown

4.2 Blood and fluid loss and replacement

Estimated blood loss _____

Lowest recorded Hct/Hgb (intraoperative) _____ time: _____ Not checked Unknown

If no intraoperative Hct/Hgb is available, list first postoperative Hct/Hgb _____ time: _____

Not checked Unknown

List the volume of fluids administered intraoperatively:

Colloid _____ cc

Crystalloid _____ cc

Blood products _____ cc

Total fluids: _____ cc

Total intraoperative urine output: _____ cc

4.3 Did the surgeon request a specific blood pressure range? Yes No Unknown

If yes, please specify range. SBP _____ mm Hg MAP _____ mm Hg Unknown

4.4 Did the anesthesiologist target a specific blood pressure range? Yes No Unknown

If yes, please specify range. SBP _____ mm Hg MAP _____ mm Hg Unknown

4.5 Was any attempt made to adjust the acceptable blood pressure range to correct for the difference in height between the site of measurement and the patient's head level?

- No Yes ➔ (check one) Arterial line transducer moved to height of head
- Mathematical correction for height from BP measurement site to head level when determining goal range of acceptable blood pressure

4.6 Was deliberate or controlled hypotension used?

No

Yes ➔

Technique: <input type="radio"/> Deep inhalation anesthesia <input type="radio"/> Other drug (specify): _____ <input type="radio"/> Infusion rate: _____ <input type="radio"/> Intermittent doses: _____

4.7 Did any sudden changes in end tidal CO₂ (ETCO₂), blood pressure (MAP), and oxygen saturation (SpO₂) occur simultaneously in the case, consistent with a pulmonary embolism?

No

Yes ➔ (check all that apply- please list magnitude of changes, not absolute values & the duration of changes)

_____ mm Hg ↓ in ETCO₂ _____ mm Hg ↓ in MAP _____ % ↓ in SpO₂
 _____ minutes _____ minutes _____ minutes

4.8 If ETCO₂ monitoring was used, was the patient's ETCO₂ in the following range for a minimum of 15 consecutive minutes? Not used Unknown

(Check all that apply) 20-25mm Hg 26-30mm Hg 31-35mm Hg 36-40mm Hg >40mm Hg

4.9 If PaCO₂ monitoring was used, what was the range of the results? Not used Unknown

(Check all that apply) 20-25mm Hg 26-30mm Hg 31-35mm Hg 36-40mm Hg >40mm Hg

5.9 Did the patient experience any of the following in the first 24 hrs after surgery? (Check all that apply)

- Aphasia** No Yes ➔ Permanent Yes ➔ Temporarily for _____ hrs or days
- Coma** No Yes ➔ Permanent Yes ➔ Temporarily for _____ hrs or days
- Delirium** No Yes ➔ Permanent Yes ➔ Temporarily for _____ hrs or days
- Cognitive deficits** No Yes ➔ Permanent Yes ➔ Temporarily for _____ hrs or days
- Motor deficits**
- UE paralysis/paresis No Yes ➔ Permanent Yes ➔ Temporarily for _____ hrs or days
- LE paralysis/paresis No Yes ➔ Permanent Yes ➔ Temporarily for _____ hrs or days
- Quadriplegia/paresis No Yes ➔ Permanent Yes ➔ Temporarily for _____ hrs or days
- Hemiplegia/paresis No Yes ➔ Permanent Yes ➔ Temporarily for _____ hrs or days
- Other _____ No Yes ➔ Permanent Yes ➔ Temporarily for _____ hrs or days

5.10 Did the patient experience an ischemic stroke? No Yes Unknown

If yes, the stroke's location was:

- Brain No Yes ➔ (specify location) _____ Unknown
- Spinal cord No Yes ➔ (specify location) _____ Unknown

5.11 Please check all postoperative diagnostic tests and results:

TEST	DATE	RESULTS
<input type="radio"/> MRI or MRA head	_____	_____
<input type="radio"/> MRI or MRA cervical spine	_____	_____
<input type="radio"/> CT or CTA head	_____	_____
<input type="radio"/> CT or CTA cervical spine	_____	_____
<input type="radio"/> Carotid duplex	_____	_____
<input type="radio"/> Transcranial doppler	_____	_____
<input type="radio"/> EEG	_____	_____
<input type="radio"/> SSEP	_____	_____
<input type="radio"/> Autopsy	_____	_____
<input type="radio"/> Other	_____	_____

5.12 What was the final diagnosis regarding the etiology of the neurologic injury or death of the patient? (Check all that apply)

- Hypotension Cerebral vascular disease MI Other _____ Unknown

PLEASE INCLUDE A LEGIBLE COPY OF THE ANESTHETIC RECORD IN WHICH ALL IDENTIFYING INFORMATION HAS BEEN REMOVED. IF YOU CANNOT SEND A DE-IDENTIFIED COPY OF THE ANESTHETIC RECORD, PLEASE COMPLETE THE SUPPLEMENTAL ANESTHESIA RECORD ABSTRACTION FORM AND INCLUDE IT WITH THIS REPORT.

