



Medical Science

The International Weekly Journal for Medicine

Safe conduct of medical or surgical procedures including neurosurgical procedures and special operating procedures (SOP)

Tiwary G², Upadhyay PK¹

1. IHBAS hospital, Dilshad garden, Delhi, India
2. Red Cross hospital seema puri, Delhi, India

Publication History

Received: 22 June 2014

Accepted: 29 July 2014

Published: 06 August 2014

Citation

Tiwary G, Upadhyay PK. Safe conduct of medical or surgical procedures including neurosurgical procedures and special operating procedures (SOP). *Medical Science*, 2014, 11(41), 31-36

Safe conducts of procedures in medical science practice are the need of the day and are very much in demand by the patients which are also obligatory by law. Therefore there has to be specific special operating procedures (SOPs) for these in place to avoid any accidents and dangers to the patients and the medical personnel alike.

Policy for safe conduct of Medical procedures including any surgical management:

Broadly speaking, the policy for the conduct of medical or surgical practice including neurosurgical practice includes the following principles;

Pre-operative assessment

All medical or surgical patients including neurosurgical patients undergo a pre-operative assessment and have a provisional diagnosis documented prior to surgery. These have to be done by the medical and surgical teams participating in the procedures.

Informed consent

An informed consent is obtained prior to medical or surgical procedure including the Neurosurgical procedure in operation theatre under neurosurgery.

There should be documented procedures to prevent adverse events like wrong site, wrong patient and wrong surgery.

Only the authorized qualified Medical and surgeons should perform the procedures accordingly.

Pre operative care protocol

There should be a defined pre operative care protocol available which is applied as per the requirements in each individual case. These have to be case specific apart from general protocol.

Procedural notes or operative note

A brief procedural / operative note is documented in the procedural place / operating rooms prior to transfer out of patient from recovery area.

Post-operative plan

The Procedural operating documents should have the post-operative plan of care with specific instructions to be followed further.

The quality assurance program should include surveillance of the operation theatre environment.

There is should be established documented monitoring of surgical site infection rates.

GUIDELINES

A. The uniform standards for quality of medical or surgical care including Neurosurgical care should be followed.

B. Pre surgical evaluation and preparation should involve:

1. Review of the case sheet and clinical condition of patient;
2. Interviews with the patient, parents or guardians of a minor, or review of the available medical information if no information can be supplied by any of the above to:

I should discuss the medical/surgical history, including drug therapy;

II should perform any examinations that would provide information that might assist in decisions regarding risk and management;

3. Should orders tests and medications necessary to the conduct of procedure.
4. Should obtain consultations as necessary;
5. Should records assessment and a medical or surgical plan including Neurosurgical plan on the patient's case sheet.

C. There should be peri-operative care plan:

1. Should do re-evaluation of the patient immediately prior to medical or surgical practice including neurosurgery.
2. Should do appropriate procedure in best interest & in circumstances available to the patient.
3. Should Support of life functions under & after the surgical manipulations.
4. Should do recording the pertinent events of the procedure.

D. There should be Post procedural /surgical care plan:

1. Availability of nursing personnel and equipment as required for safe post surgery care.
2. The operating team transfers the care information pertinent to the patient's specific needs and ensures a safe transition.
3. The treating team remains with the patient as long as necessary;
4. The patient should be discharged from the care unit in accordance with policies established by the Department.
5. The duration of surveillance in the care unit should be determined by the status of the patient and the judgment of the Consultant in-charge.

E. Patient/Family Education- The patients and family members should be informed and educated about the condition and treatment options, likely outcome and prognosis, anticipated complications, the duration of treatment and the estimated cost.

Basic standards for medical/ surgical care

These standards should apply to all patients who receive care in Medical/surgery. Under exceptional circumstances, these standards may be modified. When this should be the case, the circumstances should be in the patient's record.

Process for routine preoperative laboratory and diagnostic screening

Preoperative tests, as a component of the pre Procedure evaluation, should be indicated for various purposes.

Medical/Standards for basic monitoring

These standards should be applied to all intensive care in Medicine/surgery. These standards may be exceeded at any time based on the judgment of the responsible treating team. They are intended to encourage quality patient care. They are subject to revision from time to time, as warranted by the evolution of technology and practice. Treating member remains present in the room throughout the conduct of all Medical/surgical care because of the rapid changes in patient status may occur during anesthesia

CARE PROCEDURES AND DOCUMENTATION OF OPERATIVE CARE

Documentation is a factor in the provision of quality care and is the responsibility of a treating team.

I. Pre surgical Evaluation of patient interview, Medical history, surgical history, medication history and physical examination.

- a. Review of objective diagnostic reports.
- b. The documentation of a provisional diagnosis prior to a surgical procedure.
- c. Assessment of Neurosurgical status.
- d. Formulation of the treatment plan and discussion of the risks and benefits of the plan with the patient or the patient's representative.
- e. Patients and their families are involved in making informed decisions.
- f. Due care is to be taken to prevent adverse events like wrong site, wrong patient and wrong surgery. This is assured by the following activities:
 - g. The part/ side to be operated upon should be clearly marked by the member of medical staff on the treating team after doubly cross checking from the case sheet of the patient prior to shifting of the patient to OT.
 - h. The member of the treating team should write post-operative orders which include the following:
 - i. The names of the Doctors, anesthetists, staff nurses, scrub nurse, OT technicians etc involved in the case.
 - ii. The type of anesthesia administered.
 - iii. The procedure performed and its details.
 - iv. Problems encountered, if any.
 - v. Drug order, clearly and legibly along with special instructions.
 - vi. Other instructions
 - vii. Monitoring- its type and frequency etc.
 - viii. The histopathology form filling in details, if any.
 - j. A record of vital signs and level of consciousness.
 - k. Drugs administered their dosage and route of administration.
- M Type and amounts of intravenous fluids administered, including blood and blood products.
- n. Any unusual events including post surgical or post procedural complications.
- o. Post surgical visits till patient is discharged.
- p. All surgical site and associated infections and systemic infections are actively monitored.

Quality Assurance

The quality monitoring program for Medical/surgery should be in place and is composed of the following activities: There is continuous monitoring of quality parameters related to ICU, OT and wards. The treating doctor leads & participates in a planned program for evaluation of quality and appropriateness of the care of patients and guides other team member in resolving identified problems as a team leader. It is ensured that only qualified and authorized persons carry out the treatment and procedures. The care protocols and basic standards are defined and documented for uniformity of care. There are also standard treatment guidelines available for management of critical neurosurgery care to ensure the optimum standards of care as per the current evidences. The Infection control is managed and monitored by the HIC committee in coordination with the department. This includes surveillance of the operation theatre environment.

GUIDELINES FOR MONITORING OF SURGICAL SITE INFECTIONS

This involves:

1. Taking culture sensitivity samples from surgical sites for aerobic and anaerobic cultures is done as a routine for all post operative cases as per the judgment of the operating surgeon and his team. Such culture- sensitivity reports are documented. Pattern of c/s guide the prophylactic and therapeutic prescription of the antibiotics in surgical cases.

Regular monitoring of urinary tract infections, respiratory infections, intra-vascular device infections and other infections in surgical patients is done.

GUIDELINES TO PREVENT WRONG PATIENT WRONG SITE OPERATION

- 1) The part/ side to be operated upon should be clearly marked by the member of medical staff on the surgical team after doubly cross checking from the case sheet of the patient prior to shifting of the patient to OT. The staff nurse is responsible for ensuring the right patient and the right site for surgery in addition to the Consultant/ SR in-charge.
- 2) Neurosurgical senior resident and anesthesia team separately identify the patient and note down the heir notes in case files.
- 4) anesthetist administering anesthesia should confirms all notes before anaesthetizing the patient and puts note in patient case file.
- 5) The operating surgeon before cleaning and draping of the patient himself should reconfirms the diagnosis, the surgical procedure planned, the part and side of the surgery planned.

INFORMED CONSENT FORM FOR SURGICAL PROCEDURES, should be followed in all operations a sample format given below.

Table 1
 Informed consent

S.No	Sample format of a institute/hospital(can be adopted or modified according to the specific institution)
	<p>SURGICAL PROCEDURES GENERIC CONSENT FORM for surgery (sample consent form may be modified according to specific situations)</p> <p>In case of emergency if patient condition requires immediate intervention, any neurosurgical procedure or resuscitation should be done and any modification or variation from the said procedure should be communicated to the relatives as soon as possible.</p> <p>This is only illustrative and no guarantee of any sort can be given as different human body respond differently to same type of therapy or procedure and same individual may have different effect at different times and condition. Relatives are encouraged to talk to the consultant in charge frequently at designated times to keep themselves abreast about the progress or regress, if any, in the condition of their patients.</p> <p>A. INTERPRETER An interpreter service if required should be provided</p> <p>B. CONDITION AND PROCEDURE The surgeon should explain that I have the following condition: <i>(Doctor to document in patient's own words)</i> <i>that I have been advised to undergo the following treatment/ procedure</i></p> <p>C. RISKS OF THIS PROCEDURE The risks of the surgery should be mentioned.</p> <p>D.SIGNIFICANT RISKS AND RELEVANT TREATMENT OPTIONS The doctor should explain significant risks and problems specific to patient, and the likely outcomes if complications occur.</p> <p>E.PATIENT CONSENT I acknowledge that: <input type="checkbox"/> The doctor has explained my medical condition and proposed procedure. I understand the risks of the procedure including the risks that are specific to me, and the likely outcomes. <input type="checkbox"/> The doctor has explained other relevant treatment options and their associated risks. The doctor has also</p>

explained the risks of not having the procedure.

I have been given the Anesthesia informed consent form also.
 I was able to ask questions and raise concerns with the doctor the procedure and its risks, and my treatment options. My questions and concerns have been discussed and answered to my satisfaction.

I understand that the procedure may include a blood/blood product transfusion.

I understand that if organs or tissues are removed during the surgery that these may be retained for tests for a period of time and then disposed of sensitively by the hospital.

The doctor explained to me that if immediate life-threatening events happen during the procedure, they will be treated accordingly.

It has been explained to me, that during the course of or subsequent to the Operation/Procedure, unforeseen conditions may be revealed or encountered which may necessitate urgent surgical or other procedures in addition to or different from those contemplated. In such exigency, I further request and authorize the above named Physician / Surgeon or his designee to perform such additional surgical or other procedures as he or they consider necessary or desirable.

I understand that no guarantee has been made that the procedure will improve the condition and that the procedure may make my condition worse.

On the basis of the above statements,

I hereby authorize (name or names of doctors) and those he may designate as associates or assistants to perform upon me the following medical treatment, surgical operation and / or diagnostic / therapeutic procedure.

I REQUEST TO HAVE THE PROCEDURE

Name of Patient/relative Decision Maker.....

Relationship

Signature

Date.

Name of the Witness.....

Relationship/Designation.....

Signature Date

REFERENCES

F. INTERPRETER'S STATEMENT

I have given a translation in.....

Name of interpreter

Signature Date

G. surgeon's STATEMENTS

I have explained

- The patient's condition
- Need for treatment
- The procedure and the risks
- Relevant treatment options and their risks
- Likely consequences if those risks occur
- The significant risks and problems specific to this patient

I have given the Patient/ Guardian an opportunity to:

- Ask questions about any of the above matters
- Raise any other concerns,

Which I have answered as fully as possible. I am of the opinion that the Patient/ Substitute Decision Maker understood the above information.	
Name of neurosurgeon	Designation
Signature	Date

Medical Science