



Patients Safety & Invasive Procedures

Patient Safety
Lecture no. 11

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Objectives:



The main causes of adverse events in surgical and invasive procedural care.



How to use the guidelines, verification processes and teamwork to facilitate the correct patient receiving the correct treatment at the appropriate time and place.



The verification processes to avoid wrong patient, wrong side and wrong procedure errors (e.g. ID Wrist band, a surgical checklist).



Adhere to practice techniques that reduce risks and errors (e.g. time-outs, briefings, debriefings, stating concerns).

◆ This lecture was presented by Dr. Yasser Sabr.

◆ For the required reading **from Blackboard** click [here](#)



The Main Causes of adverse events associated with invasive procedural and surgical care

1. Poor infection control methods

The implementation of safer infection control practices such as:

1. Administration of prophylactic antibiotics
2. Hand hygiene (5mts) has reduced postoperative
3. Personal protective equipment

mts= minutes

2. Inadequate patient management

- Inadequate implementation of protocols or guidelines
- Poor leadership and poor teamwork
- Conflict between different departments/groups
- Inadequate training and preparation of staff eg. The nurse working in operating room is different from the nurse working in outpatient department so she has no knowledge or experience on how to handle invasive procedures
- Inadequate resources eg. Problem with equipment
- Overwork eg. someone having night duty & in the morning they have to perform number of surgeries, so they may harm the patient cause they're tired and lack concentration
- Lack of a system for managing performance

3. Failure to communicate effectively before, during and after procedures

to communicate effectively **before, during and after** operative procedures

(e.g. insufficient use of SBAR & Miscommunication).

Proper communication= eliminate the possibility of mistakes and adverse events



Types of communication failure associated with doctors

Type of failure	Definition	Illustrative example
Occasion	Problems in the situation or context of the communication event	The staff surgeon asks the anesthesiologist whether antibiotics have been administered. At this point, the procedure has been under way for over an hour.
Content	Insufficient or inaccurate information being transferred	As they are preparing for the procedure, the anesthesia fellow asks the staff surgeon if an ICU bed has been reserved for the patient. The staff surgeon replies that the "bed is probably not needed, and there is not likely one available anyway, so we'll just go ahead Complex cases are at high risk
Audience	Gaps in the composition of the group engaged in the communication	The nurses and the anaesthesiologist discuss how the patient should be positioned for surgery without the participation of a surgical representative Eg. Position of the patient, the patient should be positioned by the group engaged (nurse, anesthesiologist, surgeon). And usually it should be done before the surgeon starts the procedure.



The Main adverse events Due to inadequate patient management associated with surgical care team

✦ Infections and postoperative sepsis

✦ Respiratory complications

✦ Cardiovascular complications

✦ Thromboembolic complications



Verification processes for improving surgical care

- A verification process ensures that the **correct procedure is performed on the right patient, right side, site and the right organ**. Effective methods exist, such as **evidence-based guidelines, protocols or checklists**, to support health-care providers achieve safer care

Guidelines	Systematically derived statements that help practitioners to make decisions about out care in specific clinical circumstances. These should be research or evidence based.
Protocol	Is a set of sequential steps that should be followed in a particular order , enabling the task to be completed. <i>Protocols are developed from guidelines</i>
Checklist	Is used to ensure that certain mandatory items are not forgotten. Such as (timeout). <i>Checklists are developed from Protocols</i>

Surgical consent form

a form **signed by a patient** prior to a medical procedure to confirm that he or she agrees to the procedure and is aware of any risks that might be involved. The primary purpose of the consent form is to provide evidence that the patient gave consent to the procedure.

Pre-operation checklist

Tool to promote patient safety in the perioperative period. Intended to give teams a simple, efficient set of priority checks for improving effective **teamwork & communication**.

Surgical safety checklist

Communication tool that is used by a team of operating room professionals (nurses, surgeons, anesthesiologists, and others) to discuss important details about a surgical case at three distinct stages or phases during surgery: Pre-induction, Time out, and Debriefing

Done by whom?

- **Surgical consent form: Physician (Senior/ consultant).**
- **Pre-operation checklist: Nurses.**
- **Surgical safety checklist: Nurses, Surgeons, Anesthesiologists.**



Consent forms & checklists

Surgical consent form

Surgical safety checklist



Video from Dr's slides

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Informed Consent for Surgical Operation / Procedure
موافقة على إجراء العملية الجراحية / الجراحية

To be filled by the patient or his/her relative:
أني hereby give my consent and authorize Dr. [Name] or his assistants as may be necessary, to perform the following operation / procedure:
أنا hereby أعطي موافقتي وأخوذة د. [Name] أو مساعديه كما قد يكون من الضروري، لإجراء العملية الجراحية / الجراحية التالية:

Type of Anesthesia / Sedation:
 General Spinal Regional Local Other

I acknowledge that the nature and purpose of the operation / procedure mentioned above, anesthesia (if appropriate), the risks involved, the possibility of complications, and possible alternatives have been explained to me by Dr. [Name].
أنا أعترف أنني أعلم طبيعة الغرض من العملية الجراحية / الجراحية المذكورة أعلاه، التخدير (إذا كان مناسباً)، المخاطر المحتملة، وإمكانية البدائل التي قد تكون متاحة لي من قبل د. [Name].

I was given the opportunity to ask questions related to my operation / procedure and all my questions have been answered, and I have agreed to the mentioned operation / procedure.
أنا قد أُعطيتم الفرصة لطرح الأسئلة المتعلقة بعملية الجراحة / الجراحية، وقد تمت الإجابة على جميع أسئلتكم، وأنا قد وافقت على العملية الجراحية / الجراحية المذكورة أعلاه.

I confirm that I have read and understood in the medical history and physical examination, the nature and purpose of the operation / procedure, the risks involved, the possibility of complications, and possible alternatives and request that it proceed.
أنا أؤكد أنني قد قرأت وفهمت في التاريخ المرضي والفحص البدني، طبيعة الغرض من العملية الجراحية / الجراحية، المخاطر المحتملة، وإمكانية البدائل التي قد تكون متاحة لي من قبل د. [Name].

The following applies to surgery in high risk patients only:
The following applies to surgery in high risk patients only:
I have been fully informed of the high risk associated with the operation / procedure and have the possibility of serious morbidity as a result of the surgery procedure has been explained to me.
يخضع هذا القسم من الموافقة فقط للمرضى المعرضين لخطر عالٍ:
أنا قد أُعطيتم الفرصة لطرح الأسئلة المتعلقة بعملية الجراحة / الجراحية، وقد تمت الإجابة على جميع أسئلتكم، وأنا قد وافقت على العملية الجراحية / الجراحية المذكورة أعلاه.

Dr. Name: _____ Date & Time: _____

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Surgical Safety Checklist

Date: _____

SIGN IN - BEFORE INDUCTION OF ANESTHESIA
Pre-operative Verification:
1 Correct patient (Wrist Band with name & MRN, DOB)
2 Correct site/side marked (right, left, organ)
3 Correct, signed and valid consent
4 Correct procedure
5 Relevant documentation:
History & Physical Assessment, Care & Discharge Plans
Pre-op Checklist
Anesthetic Record - Pre Operative Assessment
Medication Record / Medication Reconciliation
6 Correct diagnostic and laboratory test results
7 Availability of request for blood and blood products
8 Availability of required implants/device/ special equipments
10 Known allergies
11 Pre-op medications & antibiotic prophylaxis given
12 Communicate anticipated critical events

TIME OUT - BEFORE SKIN INCISION
Carry out a Surgical Pause and confirm from the surgical team:
1 Correct patient (Wrist Band with name & MRN, DOB)
2 Correct site/side marked
3 Correct procedure and correct patient's position
4 Correct relevant images or properly displayed on PACS screen
5 Correct implants, devices and special equipment
6 Antibiotic prophylaxis given

SIGN OUT - BEFORE PATIENT LEAVES OR
Post-Op Verification: Nurse verbally confirms with surgeon:
1 Confirmation on the procedure performed
2 Instruments, needles, sponge and all counts are correct
3 All specimens are labeled correctly and correct patient's name
4 Any equipment problems to be reported
5 Duration of Antibiotic prophylaxis is documented in the physician orders
Remarks: _____

Name	Signature	Comp. No / Pager No	Name	Signature	Comp. No / Pager No	Name	Signature	Comp. No / Pager No
S*			S*			S*		
A*			A*			A*		
N*			N*			N*		

S* - Surgeon A* - Anesthetist N* - Nurse
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Surgical safety checklist (parts)

1 Sign in

2 Time out

3 Sign out

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A*		
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A* - Anesthetist N* - Nurse

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S*		
A*		
N*		

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Practice\Techniques in Operating Room that Reduce Risks and Errors

Comply with the surgical checklist

Participating in team briefings and debriefings

Appropriately sharing information

Asking questions & Teaching

Stating or sharing intentions

Managing workload

Summary

- Adherence to infection control policy & Importance implementation of surgical guidelines
- Health-care professionals need to understand the reasons for the guidelines
- Protocols and verification steps can minimize mistakes in patient identity
- The use if everyday techniques can improve communication and minimize errors



Team Leaders

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Team Members

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Aryam Almsari	Moath Alhudaif
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