9. Patient Safety And Invasive Procedures

Objectives:

- Describe The Main Types Of Adverse Events Associated With Surgical And Invasive Procedural Care
- Explain The Verification Processes For Improving Surgical And Invasive Procedures‟ Care
- Explain Techniques That Reduce Risks And Errors (E.G. Time-outs, Briefings, Debriefings, Stating Concerns).

Important | Doctors’ notes | Extra | ***New terminology***

Editing file | Feedback form | Lecture Handout

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Lecture Overview

Adverse Events

Associated w/ invasive procedural & surgical care

- poor infection control methods
- Inadequate patient management
- Failure of communication

1. Describe The Main Types Of Adverse Events Associated With Surgical And Invasive Procedural Care

The main types of adverse events associated with invasive procedural and surgical care

1. Poor infection control methods (e.g. Late administration of antibiotic prophylaxis)
2. Inadequate patient management (e.g. Uncontrolled glucose level of a diabetic patient before the procedure)
3. Failure by health-care providers to communicate effectively before, during and after operative procedures. (its types are in the next table)

From The Handout

Types of communication failure associated with doctors

Types of failure	Definition	Illustrative example , and analytical note *(in italics)*
Occasion	Problems in the situation or context of the communication event	The staff surgeon asks the anaesthesiologist whether antibiotics have been administered. At this point, the procedure has been under way for over an hour. *Since antibiotics are optimally given within 30 minutes of incision, the timing of this inquiry is ineffective both as a timely and as a safety redundancy measure*
Content	Insufficient or inaccurate information being transferred	As they are preparing for the procedure, the anaesthesia 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". *Relevant information is missing and questions are left unresolved: has an ICU bed been requested, and what will the plan be if the patient does need critical care and an ICU bed is not available? (Note: his example was classified as both content and a purpose failure.)*

From The Handout

Con.Types of communication failure associated with doctors

Types of failure	Definition	Illustrative example , and analytical note *(in italics)*
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. *Surgeons have particular positioning needs, so they should participate in this discussion. Decisions made in the absence of the surgeon may lead to necessary repositioning.*
Purpose	Communication events in which purpose is unclear, not achieved or inappropriate	During a living donor liver resection, two nurses discuss whether ice is needed in the basin they are preparing for the liver. Neither knows. No further discussion ensues. *The purpose of this communication—to find out whether ice is required— is not achieved. No plan to achieve it is articulated.*

2. Explain The Verification Processes For Improving Surgical And Invasive Procedures‟ Care

The 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.

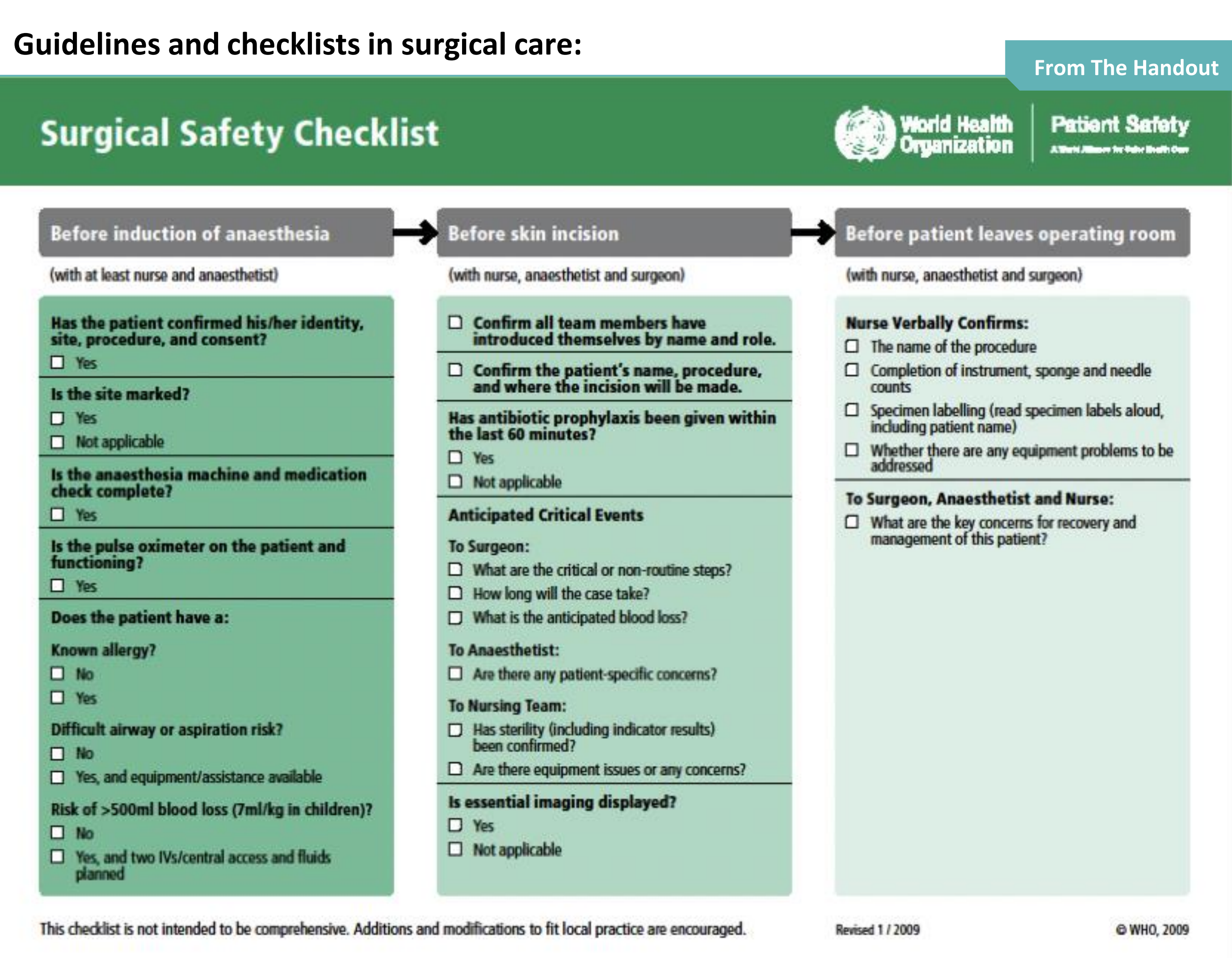
What is a guideline, protocol or checklist :

From The Handout

- A ***guideline*** gives recommendations about a certain topic. Evidence-based and comprehensive
- A ***protocol*** is a set of sequential steps that should be followed in a particular order, enabling the task to be completed.
- A ***checklist*** is used to ensure that certain mandatory items are not forgotten. quick

Guidelines and checklists in surgical care:

From The Handout



Surgical Safety Checklist

World Health Organization | Patient Safety

Before induction of anaesthesia → **Before skin incision** → **Before patient leaves operating room**

Before induction of anaesthesia

(with at least nurse and anaesthetist)

Has the patient confirmed his/her identity, site, procedure, and consent?
- ☐ Yes

Is the site marked?
- ☐ Yes
- ☐ Not applicable

Is the anaesthesia machine and medication check complete?
- ☐ Yes

Is the pulse oximeter on the patient and functioning?
- ☐ Yes

Does the patient have a:

Known allergy?
- ☐ No
- ☐ Yes

Difficult airway or aspiration risk?
- ☐ No
- ☐ Yes, and equipment/assistance available

Risk of >500ml blood loss (7ml/kg in children)?
- ☐ No
- ☐ Yes, and two IVs/central access and fluids planned

Before skin incision

(with nurse, anaesthetist and surgeon)

- ☐ **Confirm all team members have introduced themselves by name and role.**
- ☐ **Confirm the patient's name, procedure, and where the incision will be made.**

Has antibiotic prophylaxis been given within the last 60 minutes?
- ☐ Yes
- ☐ Not applicable

Anticipated Critical Events

To Surgeon:
- ☐ What are the critical or non-routine steps?
- ☐ How long will the case take?
- ☐ What is the anticipated blood loss?

To Anaesthetist:
- ☐ Are there any patient-specific concerns?

To Nursing Team:
- ☐ Has sterility (including indicator results) been confirmed?
- ☐ Are there equipment issues or any concerns?

Is essential imaging displayed?
- ☐ Yes
- ☐ Not applicable

Before patient leaves operating room

(with nurse, anaesthetist and surgeon)

Nurse Verbally Confirms:
- ☐ The name of the procedure
- ☐ Completion of instrument, sponge and needle counts
- ☐ Specimen labelling (read specimen labels aloud, including patient name)
- ☐ Whether there are any equipment problems to be addressed

To Surgeon, Anaesthetist and Nurse:
- ☐ What are the key concerns for recovery and management of this patient?

This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged.

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1 More !! :)))

3. Explain Techniques That Reduce Risks And Errors (E.G. Time-outs, Briefings, Debriefings, Stating Concerns).

Effective strategies for safety

1. Use operating room teamwork and communication techniques that reduce risks and errors:

- Participating in team briefings and debriefings

- Briefing, Time out: : قبل ما نبدأ العملية بعد ما المريض يدخل لغرفة العمليات قبل ما يصير أي بروسيجر نقول تايم أوت نمسك الباند ونقول هذا المريض الفلاني انولد بكذا كذا و نسأله لو صح و تكون النيرس معاها الورقة تشيّك و نقول إيش العملية اللي بنسويها.

- Debriefing: يصير بالأخير و أقول إيش سويت مثل لما بسوي للثايرويد لكن ما قدرت لأن خفت أسوي إنجري للنيرف أو لو دخل البيشنت بأنافلاكتك شوك. فأقول هذا كله.

- Appropriately sharing information (verbally share information)
- Asking questions
- Asserting oneself appropriately (should be able to express an opinion or ask for an opinion)
- Stating or sharing intentions (important because it alerts the team about planned actions that are not routine) (anything on your mind about the patient should be mentioned)
- Teaching (should be receptive to learn from any provider e.g. nurses) (might be accompanied by trainees & student, so you should explain why doing things, and introduce yourself)
- Managing workload (workload is distributed according to level of knowledge and skill.)

2. Processes for reviewing mortality and morbidity:

- Is the meeting structured?
- Is there an emphasis on education and understanding?
- Is prevention the goal of the discussion?
- Are these meetings considered a core activity?
- Is everyone involved?
- Are juniors, including students, encouraged to attend?
- How are deaths handled?
- Is a written summary of the discussions kept?

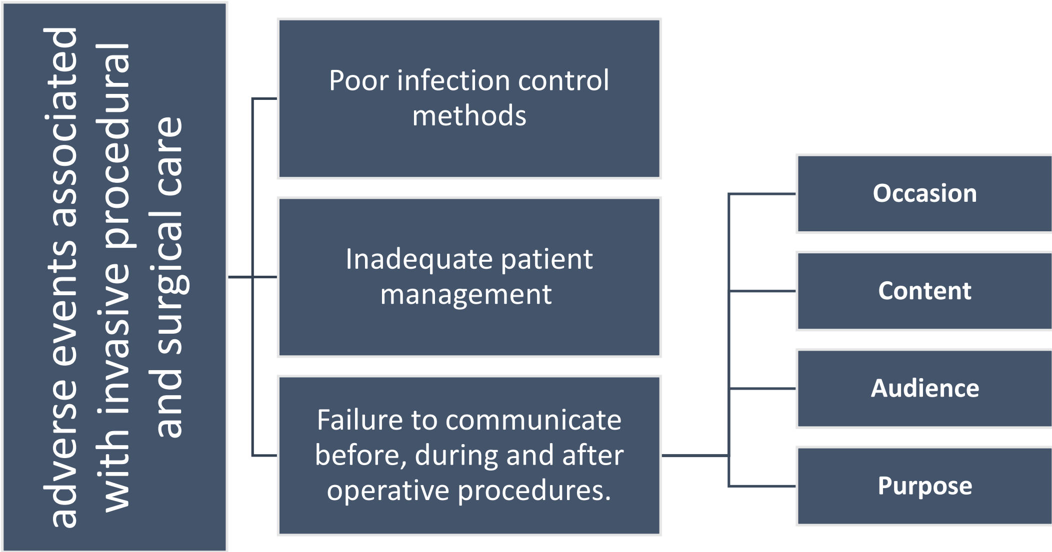
High incidence of thrombosis → why? → we don't give prophylaxis → new policy

Summary

- The value of 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

You're DONE!

Summary



Occasion : Problems in the situation or context of the communication event.

Content : Insufficient or inaccurate information being transferred.

Audience : Gaps in the composition of the group engaged in the communication

Purpose : Communication events in which purpose is unclear, not achieved or inappropriate

The Verification Processes For Improving Surgical Care

It ensures that the correct procedure is performed on the right patient, right side, site and the right organ.

Guideline : gives recommendations about a certain topic

Protocol : is a set of sequential steps that should be followed in a particular order, enabling the task to be completed.

Checklist : is used to ensure that certain mandatory items are not forgotten.

Effective strategies for safety

1. Use operating room teamwork and communication techniques that reduce risks and errors
2. Processes for reviewing mortality and morbidity

Questions

Q1: List the main types of adverse events associated with invasive procedural and surgical care?

- Poor infection control methods
- Inadequate patient management
- Failure by health-care providers to communicate effectively before, during and after operative procedures

Q2: List the practice operating room techniques that reduce risks and errors?

- Participating in team briefings and debriefings
- Appropriately sharing information
- Asking questions
- Asserting oneself appropriately
- Stating or sharing intentions
- Teaching
- Managing workload

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References: Doctors' slides (WHO, Patient Safety Curriculum Guide) & notes.