

AADO

Trauma Series 1

~ Spinal Injury Workshop ~

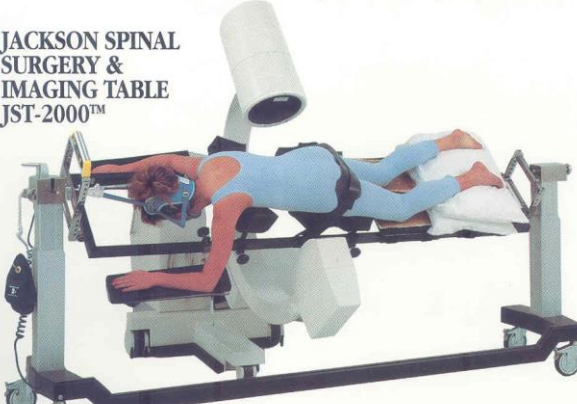
Peri- operative Management
of
Patient to undergo Spinal Surgery

22nd – 23rd February 2014

Joyce Lai
WM
OT/A&ICU
PWH

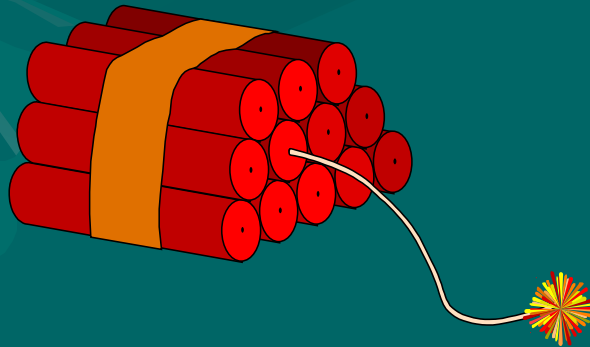


JACKSON SPINAL SURGERY & IMAGING TABLE JST-2000™



FLEXIBILITY
By application of the Imaging Table

VERSATILITY
The rotational capability facilitates



Risk Management



Risk Management

identification

assessment

prioritization of risks



Objectives

- Minimize risk
- Monitor result
- Control the probability and/or impact of unfortunate events
- Maximize the opportunities.



SURGICAL SAFETY CHECKLIST



Date and Time: _____

Patient Addressograph

Before induction of Anaesthesia ⇨⇨⇨⇨⇨⇨⇨

Before skin incision ⇨⇨⇨⇨⇨⇨⇨⇨⇨⇨⇨⇨⇨⇨⇨⇨

Before patient leaves operating room ⇨⇨⇨⇨⇨⇨

SIGN IN

- Patient has Confirmed
 - IDENTITY
 - SITE
 - PROCEDURE
 - CONSENT
- Site Marked / Not applicable
- Anaesthesia Safety Check Completed / Concentration & Dosage of Local Anaesthesia (LA)
- Pulse Oximeter on Patient & Functioning
- Does Patient have a:
 - Known Allergy?**
 - NO
 - YES
 - Difficult Airway / Aspiration Risk?**
 - NO
 - YES, and Equipment / Assistance Available
 - Risk of > 500 ml Blood Loss (7 ml/Kg in Children)**
 - NO
 - YES, and Adequate IV access & Fluids Planned

	Anaesthetist /Surgeon in LA	OR Nurse
Signature		
Name or Staff ID		

TIME OUT

- Confirm all team members have introduced themselves
By Name and Role
- Surgeon, Anaesthesia Professional and Nurse Verbally Confirm
 - PATIENT
 - SITE
 - PROCEDURE
- Anticipated Critical Events
 - Surgeon Reviews: What are the Critical or Unexpected Steps, Operative Duration, Anticipated Blood Loss?
 - Anaesthesia Team Reviews: Are there any Patient - Specific Concerns?
 - Nursing Team Reviews: Has Sterility (including indicator Results) been confirmed? Are there equipment issues Or any concerns?
- Has Antibiotic Prophylaxis been given within the last 60 mins?
 - YES
 - NOT APPLICABLE
- Is Essential Imaging Displayed?
 - YES
 - NOT APPLICABLE

	Surgeon	Anaesthetist	OR Nurse
Signature			
Name or Staff ID			

SIGN OUT

- Nurse Verbally Confirms with the Team: -
- The Name of the Procedure Recorded
- Instrument, Sponge and Needle Counts are Correct (or Not Applicable)
- How the Specimen is Labelled (Including Patient Name)
- Whether There are any Equipment Problems to be Addressed
- Surgeon, Anaesthesia Professional and Nurse Review The Key Concerns for Recovery and Management of this Patient

	Surgeon	Anaesthetist	OR Nurse
Signature			
Name or Staff ID			

THAT IS ALL ?

Risk Risk Risk Risk

Risk Risk Risk Risk

Risk Risk Risk Risk

Poor Positioning

- Injury
- Bleeding
- Prolong Surgery

SSI

How to minimize the risk

- Good Nursing Care
- Safe Culture
- Documentation





Peri-operative Care

Preparation

What we prepare for?

Why we should prepare?

What we should prepare ?



What we prepare for?

We prepare for the
Patient

NOT only for the
surgery

Why we should prepare?

- To ensure safety & wellness of our patient
- To facilitate smooth running of the surgery
- To guarantee success of the planned surgery
- To encourage cost effective management
- To enhance collaborative working climate
- To protect all the ORP



What we should prepare?

- Preparation of patient & relatives
- Preparation of ORP
- Preparation of environment, theatre set-up
- Preparation of appropriated OT table
- Preparation of Patient Positioning
- Preparation of instrument & equipment
- Preparation of Inventory

ORP Preparation

- ORP Communication/knowledge (Team)
 - Surgeon
 - Nurse
 - Anaesthetist
 - Radiographer
 - POP technician



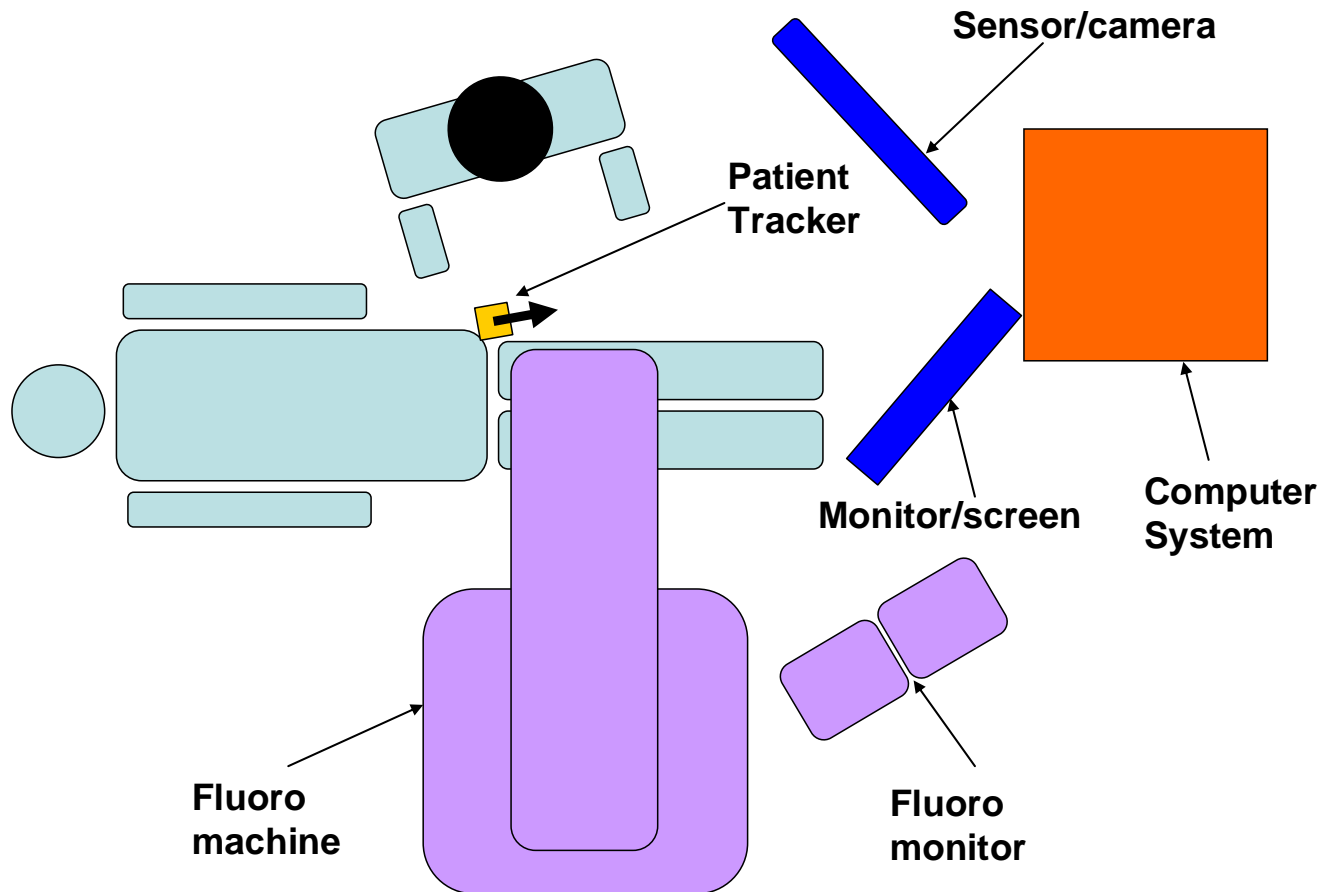
Environment/Theatre setup

According to the operation

More space for fluroscope, navigation and/or video assisted surgery

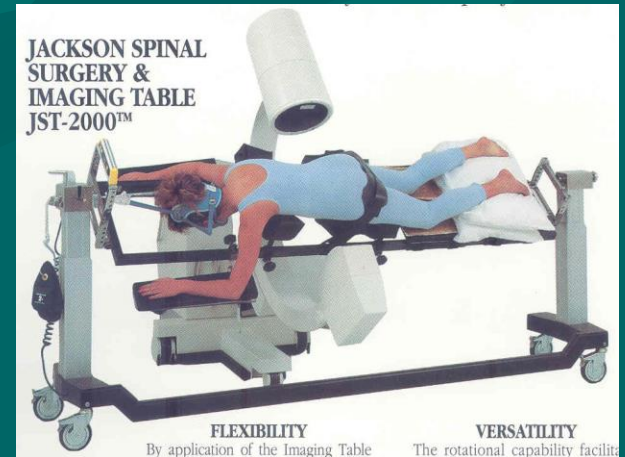
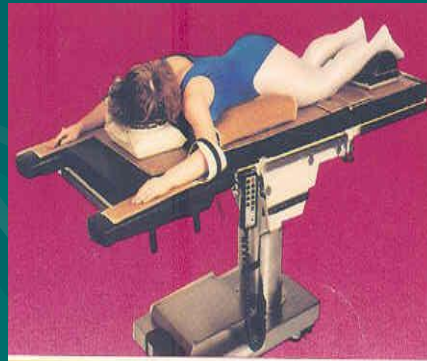
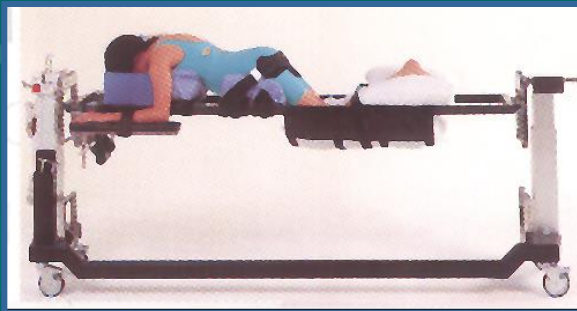
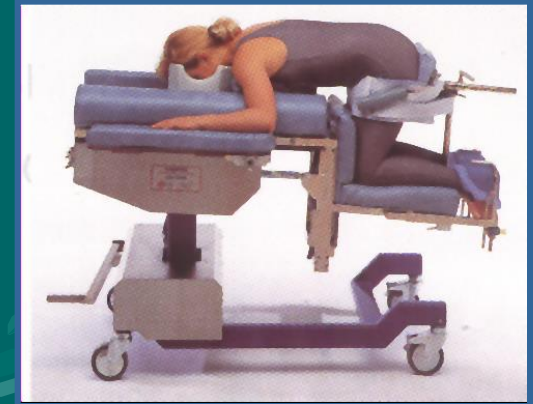
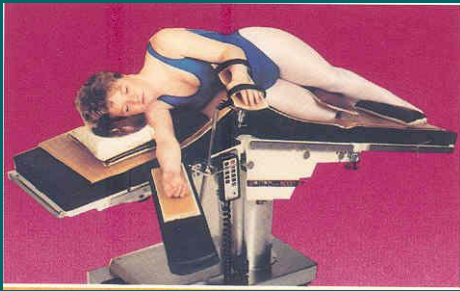
Arrange all necessary equipment to move in the theatre before starting of the procedure

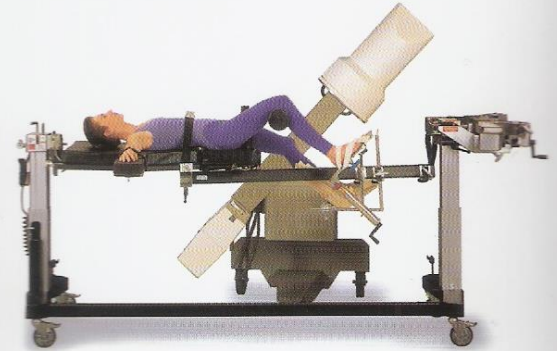
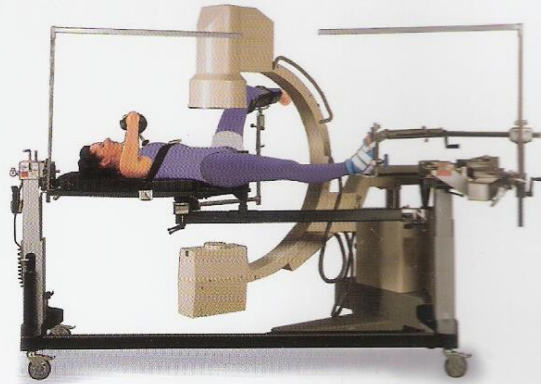
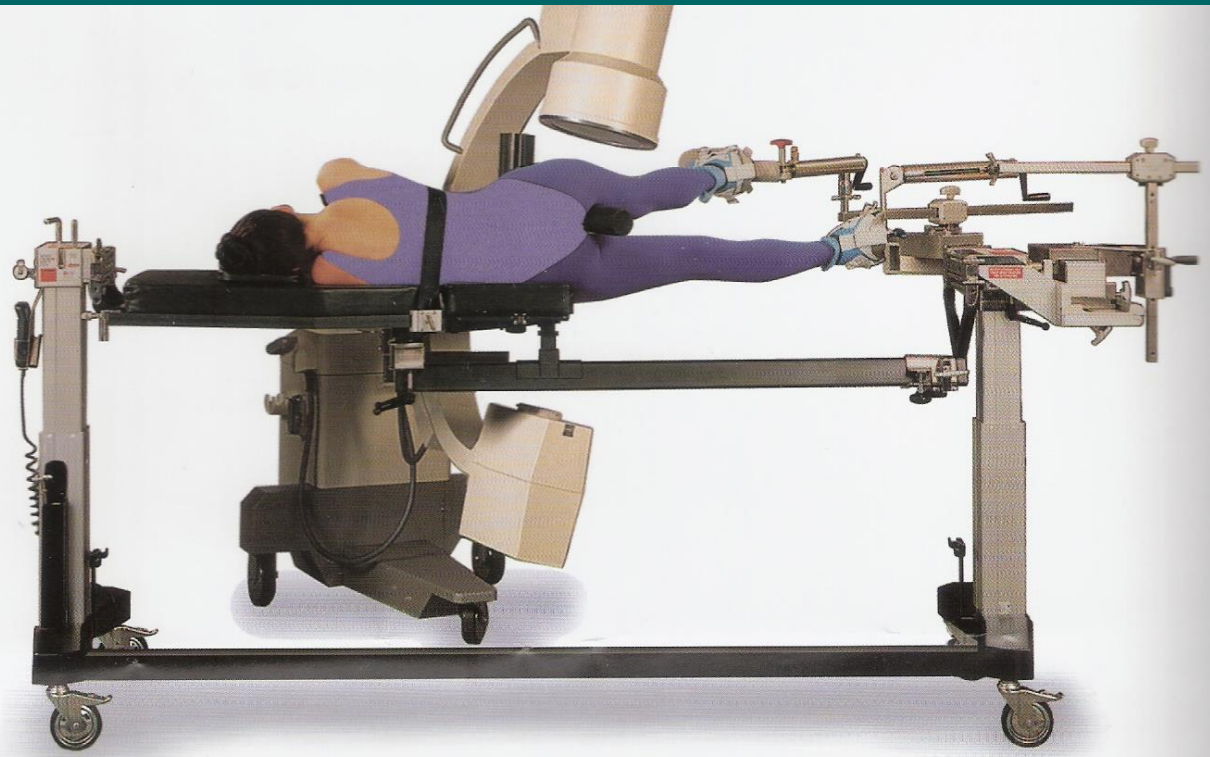
Operating room setup



Operating Table

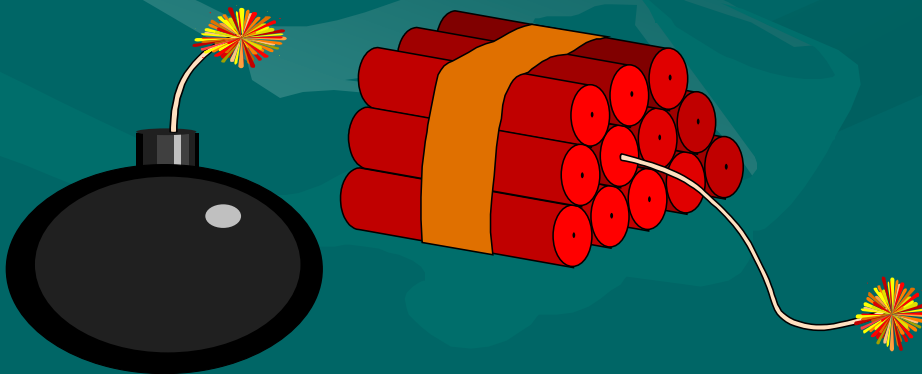
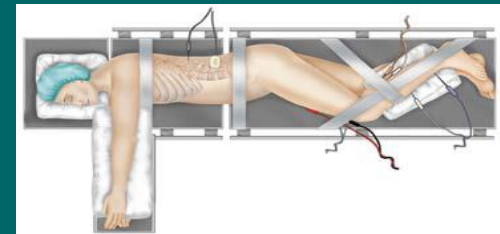
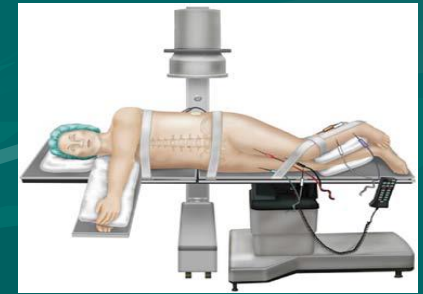
According to the surgery & positioning of the patient





Patient Positioning

- Depends on the type & approach of the surgery
- Communication is very important
- Mark on the list by chief surgeon



Risk

Types of position

Posterior approach

- Cervical

Prone with head support

- Thoracic & lumbar

Prone

Anterior approach

- Cervical

Supine with neck extension

- Thoracic / thoraco-lumbar

Lateral

- Lumbar

45° tilting

- L5-S1

Supine

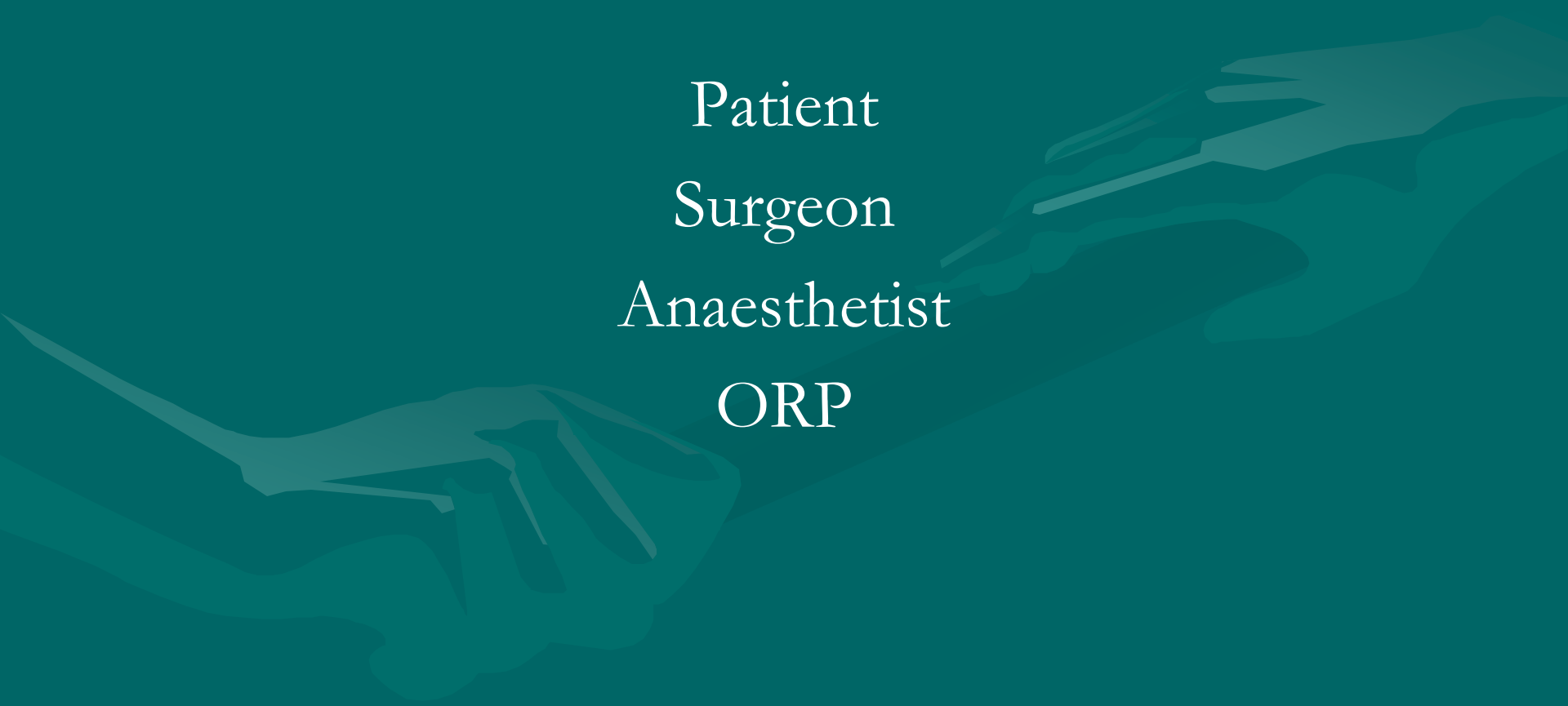
Good Positioning

Patient

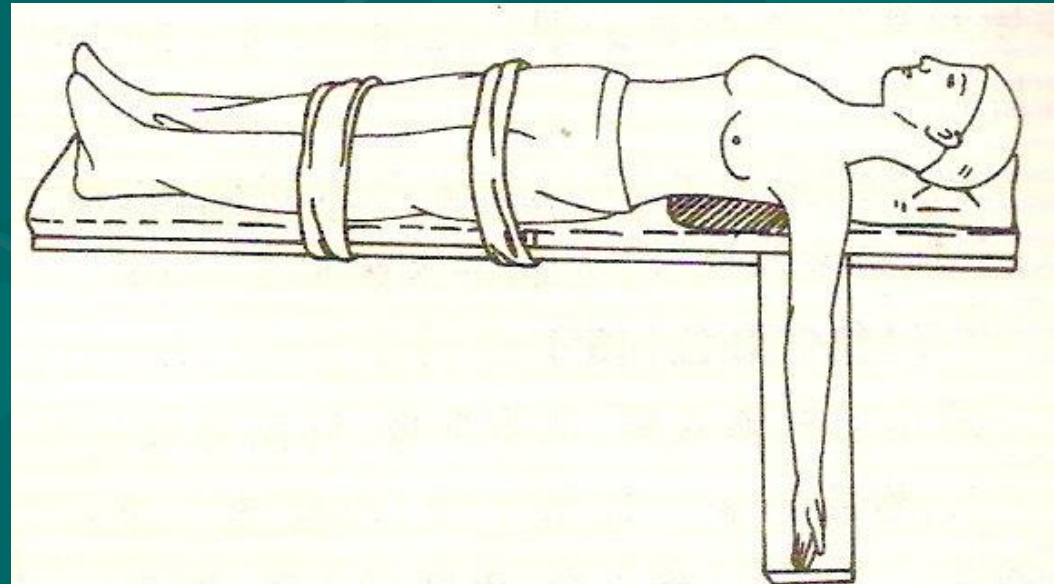
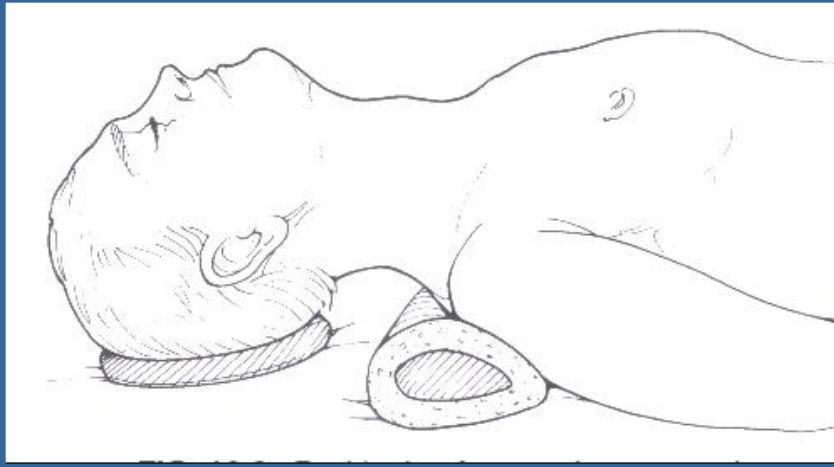
Surgeon

Anaesthetist

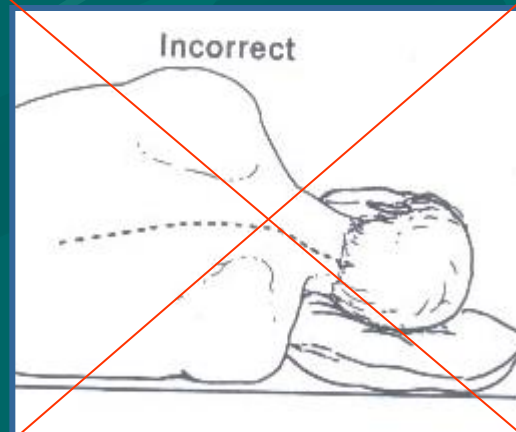
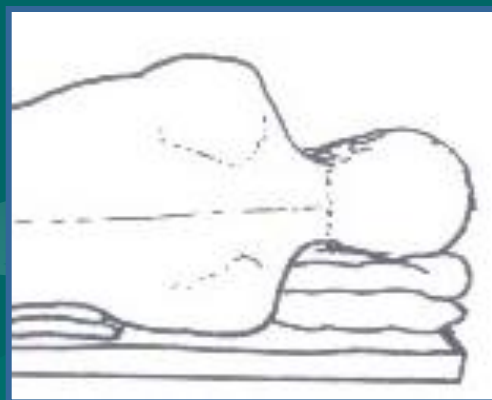
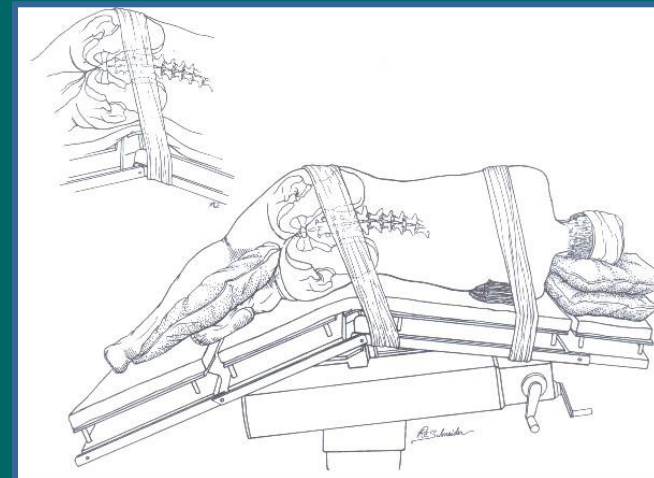
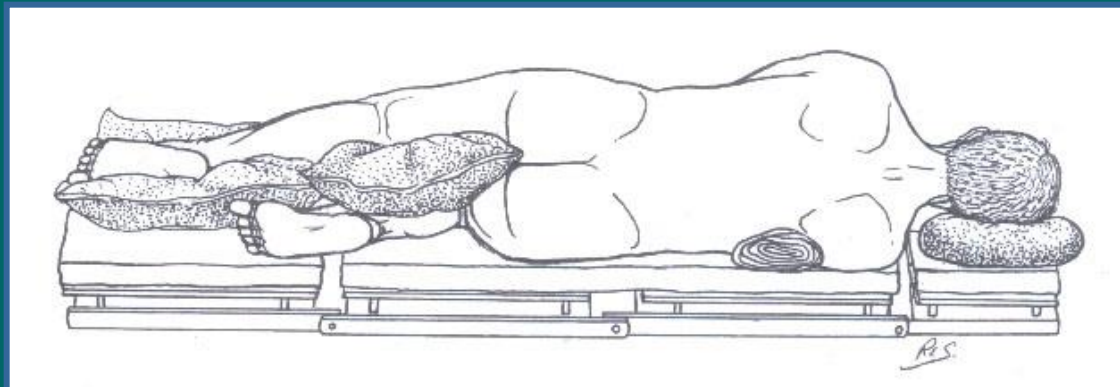
ORP



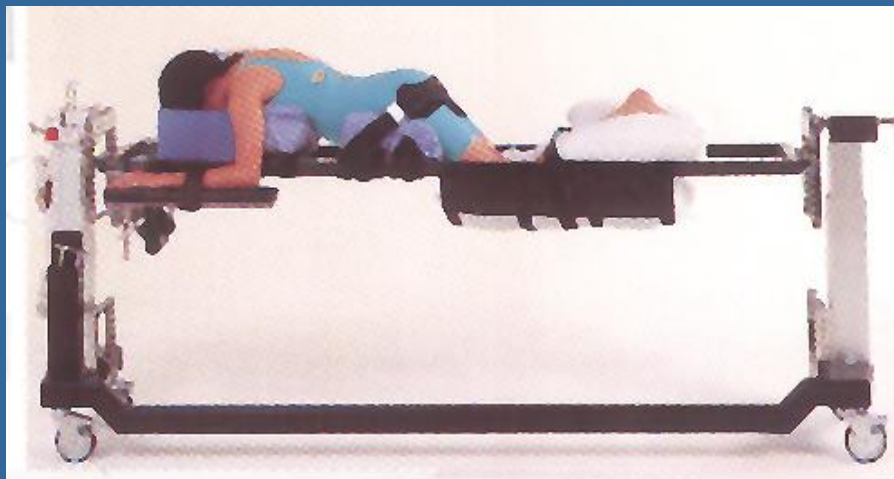
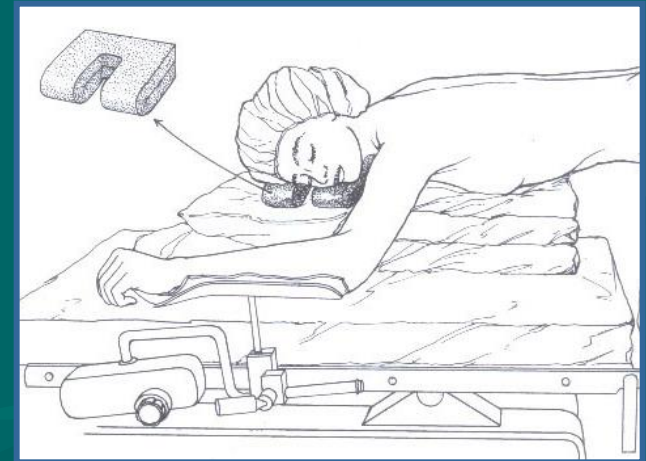
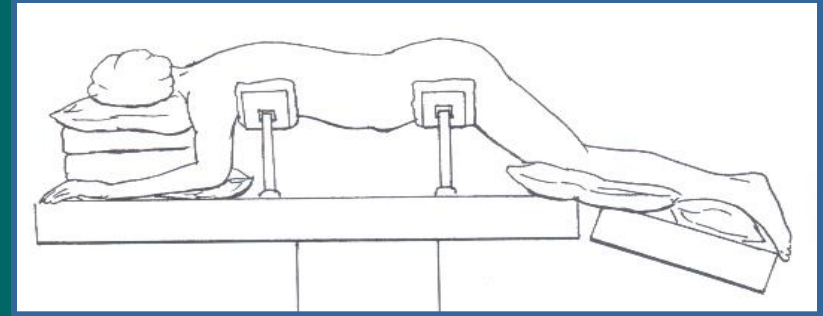
Pressure Release



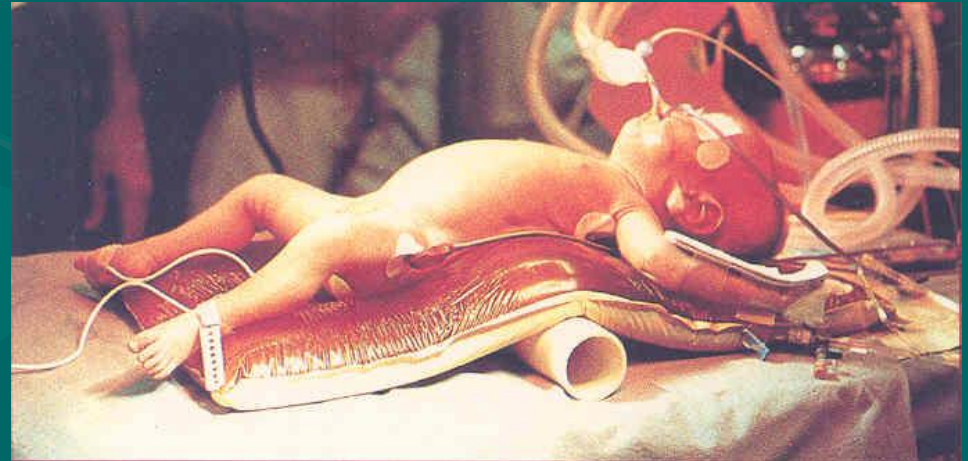
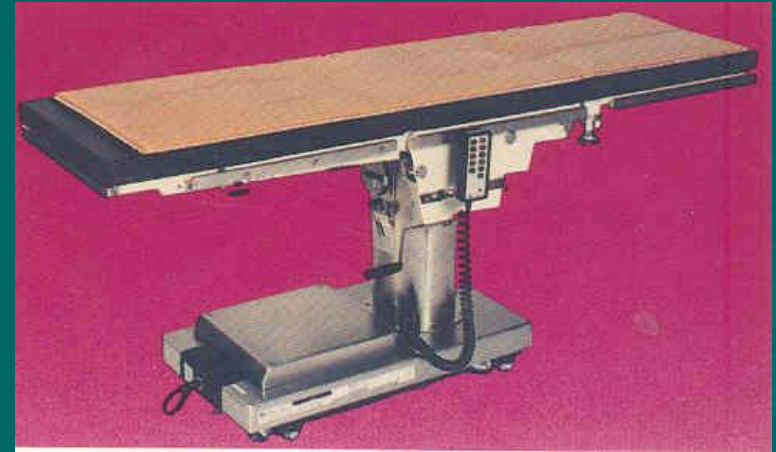
Pressure Release



Pressure Release Pressure Release Pressure Release



Device for pressure release

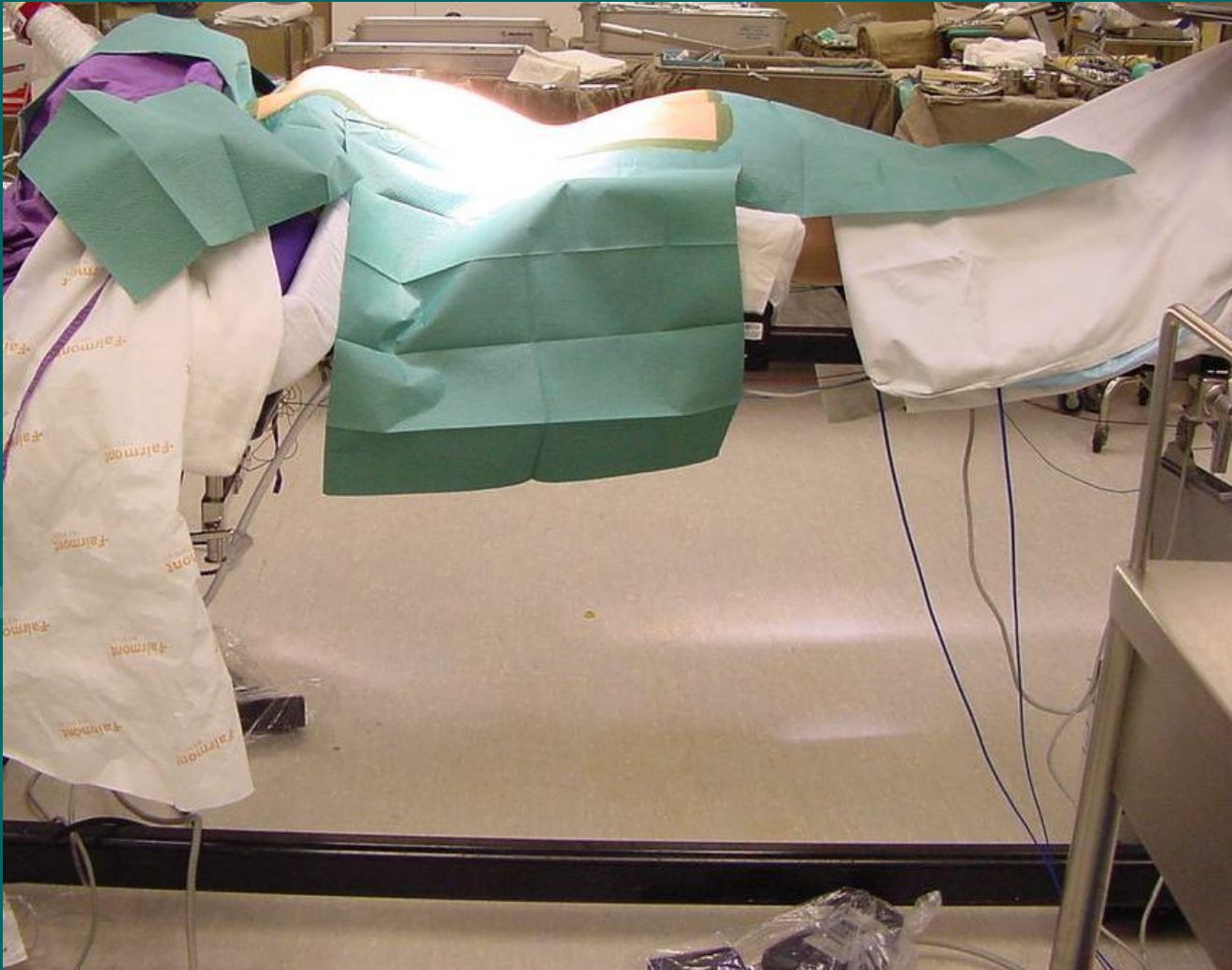




Case Sharing

The background is a solid teal color. In the lower half, there is a faint, stylized illustration of two hands shaking, rendered in a lighter shade of teal. The hands are positioned as if in a firm grip, symbolizing agreement or partnership.

Positioning for spinal surgery



Protection to pressure area



Assessment



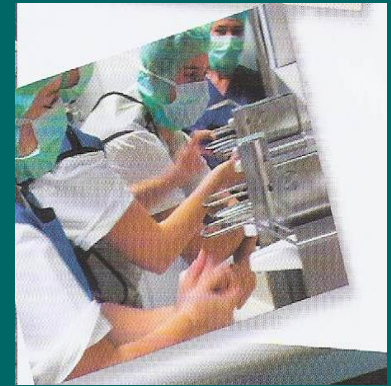
Enough Man Power







Prevention of SSI



Revised in Sept 2012



1. Remove all jewelry from hands & wrists.



2. Perform general hand washing with an antimicrobial agent and rinse under running water.



3. (Optional) Clean the subungual areas with a nail cleaner / nail brush.



OT PWH



6. Rinse under running water from fingertips to elbows in one direction.



2 minutes



4. Apply the antimicrobial agent and scrub with a circular motion on both hands and arms, from fingertips to elbows, at least 2 minutes continuously.



5. Hands are kept higher than elbows at all time.



8. Pat dry each hand & arm by using a different side of the sterile towel.



7. Stay away from sensor, water tap will stop running.



Draping



Surgical Technique

9.1 Maintain good operative technique during the operation, such as gentle tissue handling to minimize trauma

What does it means ?

Proper use of retractor



Use of Drain



Choice of dressing

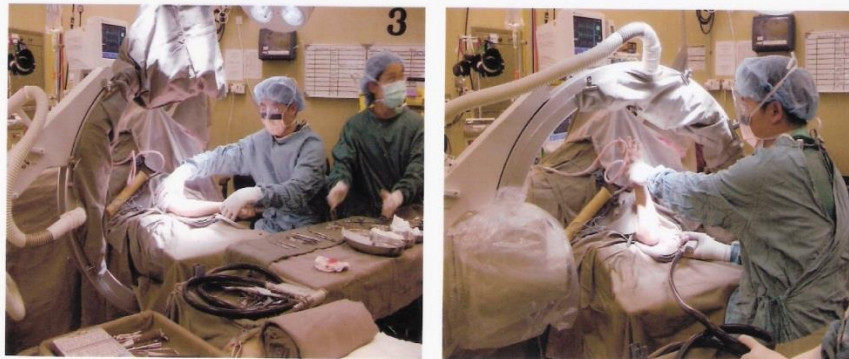


Drape for Fluoroscope



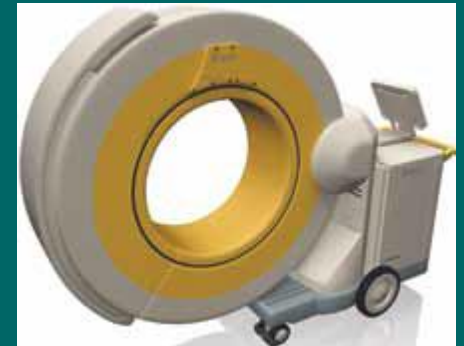
Drape for Fluoroscope

C-ARM Draping Guideline



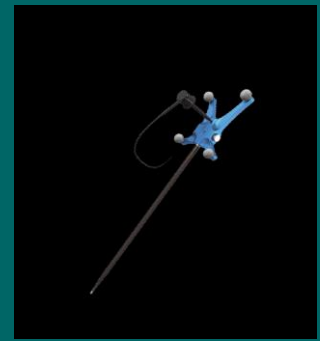
Equipment

- +/- X-Ray Machine (+/- Phantom)
- Software must be compatible with the navigation system



Equipment

- Computer and monitor
- Camera to receive signal



Don't forget your radiation protection



Power Console / Battery / Pneumatic Supply



Use of Cell Saver



Instrument

- Basic Instrument
 - Retractor
 - Roungeur
 - Dissector
 - C&O
- Instrument for special instrumentation
- Loan instrument

Consumables/Inventory

- Drapes
- Reflective Markers
- Implants





THANK YOU

