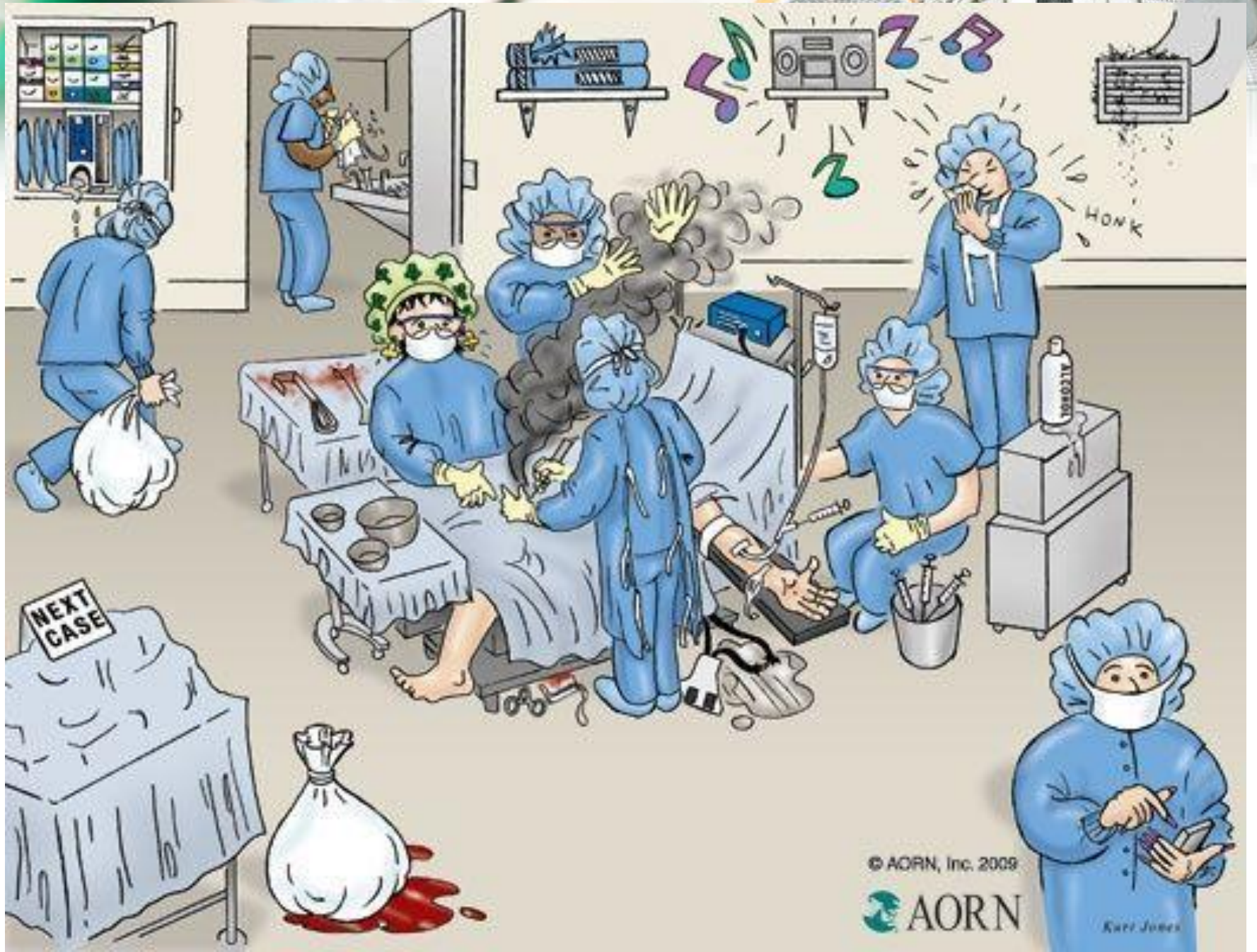





Operating Theatre Etiquette, Instruments and Diathermy

Dr Joshua Baker & Dr Mark Muhlmann



© AORN, Inc. 2009

 AORN

Kurt Jones



General Tips

- Arrive early.
- Get dressed.
- Introduce yourself and write your name on the board.



HI, EVERYBODY!



Pre-op

- Review patients pre-operatively
- Mark the surgical site and side to operate
 - Do not mark the other side
- Check consent



Booking cases

- “Green” sheet



NSW Health

REQUEST FOR NON ELECTIVE OPERATING TIME

Family Name: _____ Sex: MALE FEMALE
Given Name: _____
D.O.B: _____ H.O: _____
Address: _____
Location/Ward: _____
COMPLETE ALL DETAILS OR AFFIX PATIENT LABELS HERE

Date Booked: _____ Time Booked: _____ Public Private DVA WVC
Procedure: _____
Estimated Duration: _____ NEM From: _____ Weight: _____
Consent Signed: Yes No Planned Procedure Date: _____

Priority: <=15hrs - Immediate life threatening <=2hrs - Non-critical but emergent
 <=1hr - Life threatening conditions <=24hrs - Non-critical, non-emergent
 <=4hrs - Organ or limb threatening <=72hrs - Cannot discharge before procedure

Caesarean Code (Priority also required):
 CAT 1 - Immediate threat to the life of woman or foetus
 CAT 2 - Maternal or foetal compromise but not immediately life threatening
 CAT 3 - Needing early delivery but no maternal or foetal compromise
 CAT 4 - At a time to suit the woman and the caesarean sector team

Requesting MO: _____ Procedural Consultant: _____
Principal Proceduralist: _____ Proceduralist Availability: _____
Person Taking Request: _____ Comments: _____

Infection Control Precautions: No Contact Airborne Droplet
Specify:
X-Ray Required: Yes No Radiographer Notified: Yes No Catheter In situ: Yes No
Epidual In situ: Yes No IDC In situ: Yes No

Anaesthetic Notified: Yes No In Charge Op Suite Notified: Yes No
Person Notified: _____
Date/Time Notified: _____
Bed Manager Notified: Yes No Post-Op Sect: IPH OO EDO DOBA ICU HDU
Equipment/Instruments Required: _____
Equipment/Instruments Available: Yes No Comments: _____
Clinical Details (Medical Problems Summary): _____
Anesthetic Comments: _____
Assessed By: _____
Ward Notified of Proposed Procedure Time: Yes No Scheduled in Appointment Book: Yes
Cancellation Code: _____ Date/Time Cancelled: _____

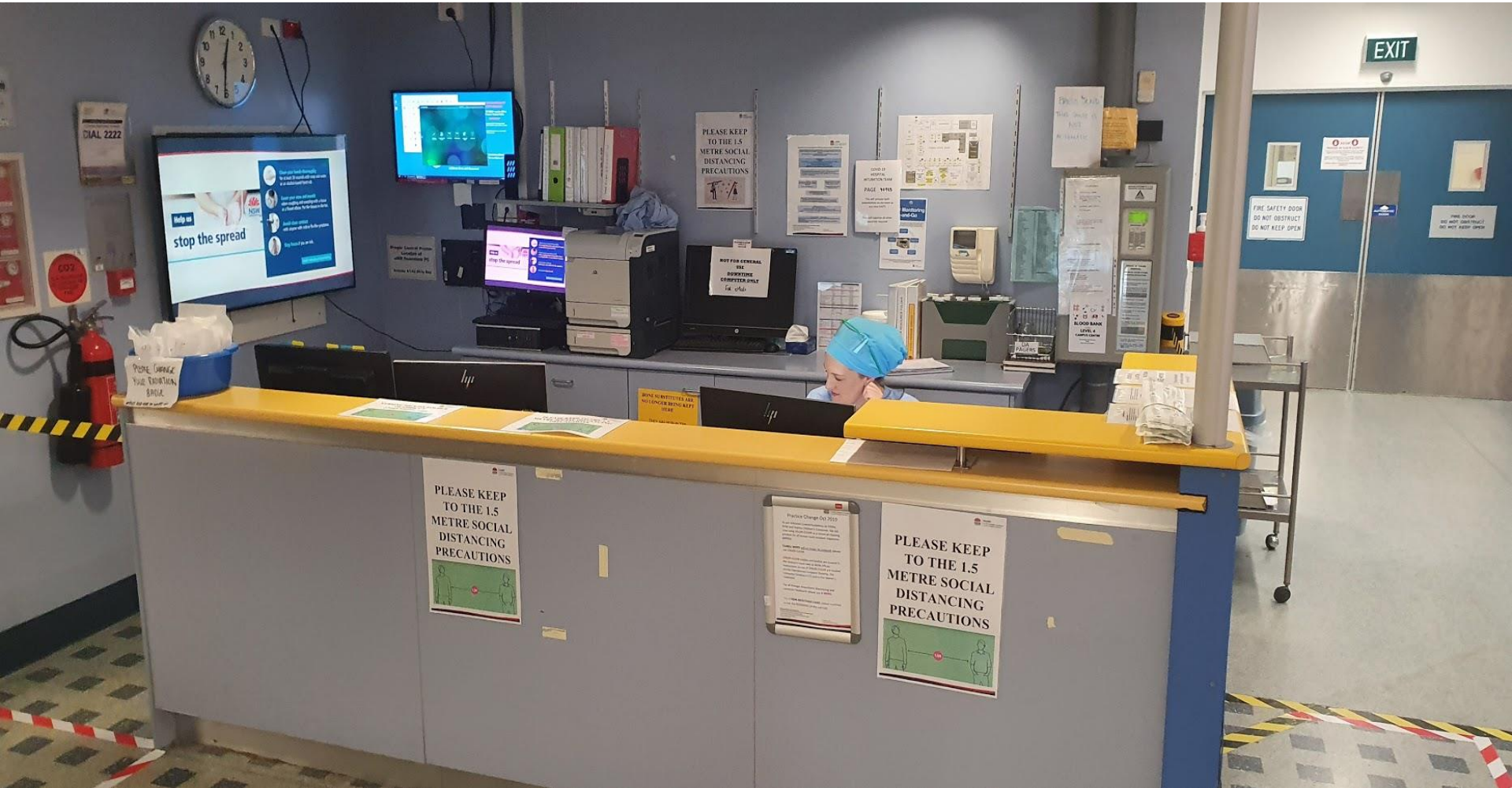
FORM TO BE SUBMITTED TO IN CHARGE OF SUITE or AFTER HOURS MANAGER

NO WRITING

Page 1 of 2



Booking desk





Speak to Anaesthetics

- Know your patients medical history



- Make sure comorbidities don't include asystole...



ACUTE CARE SURGEON

MON WED FRI

GANDY
RUSSELL

WED FRI AM

LEHANE

THU FRI AM

LINKS

ADULTS
PAEDS

WENTNUR

WENTNUR

WANAGURU

RCOS PAGER NUMBERS

NURSE MANAGERS

LORRAINE -
LEONIE - 47074
ANNE-MARIE - 46677
ELENA - 45063
SALEH - 47093

EDUCATORS

ZOE - 44389
LUKE - 46851
KIM - 47364
JULIE - 45062
GEORGIE - 47225
ANGIE - 47410

CNC

POOJA - 47330

EMR SUPPORT

CARMELINA - 47073
ANNETTE - 44586

STOCK / STORES

STORES - 43936
TASHA - 4434
SE - 45220

QA'S

DON - 44505
ALAM - 47068
ALEX - 47438
ASHUTOSH - 45010
BIKASH - 44427
CAROL - 45409
CHALKY - 45209
CIBIN - 47342
DESMOND - 45135
EVELYN - 46610
FARID - 47442
HANA - 47411
KASI - 45377
MORGAN - 44433
NATASHA - 45187
ROMAN - 44157
SHANE - 45186
SUBASH - 44948
SUBHRA - 44861
SUDAN - 47439
TINE - 45406

WOMENS

EMERG ANAES REG - 44084
GYNAE/OBS A.H REG - 44081
BED MANAGER - 44020
RESUS MIDWIFE - 44052
IN HOURS ONLY -
PORTERS IN HOURS - 44027
WOMENS A.H STAFF - 47361
TEAM LEADER - 44000
NURSES STATION - 26859

OTHERS

ADULT REG - 44346
PAED REG - 44266
OUTSIDE PORTER - 46666
DRUG KEYS - 44589
CSSD - 44361
NUMA - 43645
CSSD PAED - 47432
REPROCESSING SCOPES -
CLEANER / PSA - 45248 44610
RADIOGRAPHER - 44340 20730
A.H RADIOGRAPHER - 44164 20332
BIO MED - 44694
MAINTENANCE - 24900
TEA RELIEF PAGERS - 47410, 47411
PATIENT SAFETY
PHARMACIST FOR - 44524 (EMILY)
THEATRES

PAPR 44960

COVID-19 ANAESTHETIST

PAPR CHAMPION PAGER 44960

D.A.D.D 0427 242 727

REGIMIANO/HICKSON

P.A.D.D 0429 862 782

CHUNG

Which Theatre?

AM IN CHARGE		PM IN CHARGE		ANAESTHETIC TEAM LEADER		PAGER	
Breanna		Amanda					
C1 PAEDS EMERG	C5 Billington	A3 Adult Adhoc	A7				
Lee	Juliet 1815 Alitta 1615 ↳ Billington	Rebecca 1600 Herman 1630 Katie 1630 DES CAROL } 900-1000 CIBIN 1000-1830	Bree 1715				
Nicola 1630 Olivia 1600 Simon 1630 SUSHA 1530/SUDAN CHALEY 1630	SUSHA 1100 CHALEY 1000-1000						
C2 Adams Duffield	C6 Lowinger Sandeman	A4 ECT/Ortho Trauma	A6 Anaesthetic Lunches				
Jasmin 1630 Reema 1630 Grace 1630 SUSHA 1530/SUDAN CHALEY 1630	Machida 1630 Ebony 1630 DES CAROL } 1630	Lauren 1630 Oliver 1630 Amy 1730 DES CAROL } 1630	Harricks Mia 1615	Amber - HIBay, A2 Kat - C5, A3 Abie - C6, A4 T-Honey - C4, Hybrid Pauline - A1, C1 Self: C2, C3			
C3 PAEDS ADHOC Pasupathy	A1 Haghighi Walton + Maccioni	A5 Pirapakaran (AM) Cai (PM)	HYBRID Lennox Nagendra				
	Orie 1830 Anna 1630 Natalia 1800	Covid / outreach Kat 1715 (Pg: 45280)	Lisa 1630 Lucas 1830 Jaimie 1630 Pammie 1615				
SUSHA 1530/SUDAN CHALEY 1630	DES CAROL } 1630	CIBIN 1000-1830	CIBIN 1830				
C4 EMERG Overton Ward	A2 Lehane Shadbolt	A6	S/S Anaes				
Ellen 1530 Stacey 1800 Lina 1630 SUSHA 1530/SUDAN CHALEY 1630	Jocelyn 1830 Jenna 1630 Angelica 1630 Sheridan 1615		1830 Nina, Bonnie, Hazel, Orie Lucas, Xochimilco 2200 Jonah, Almitra 2200 Dennis, Maya, Jess P, Lin 2230 Thi, Freya	S/L Anaes Gina, T-honey Pauline, Abie Lily 2200: Queena			
DES CAROL } 1630							
MCX				Haghighi Alina 070-1730			



COVID 19





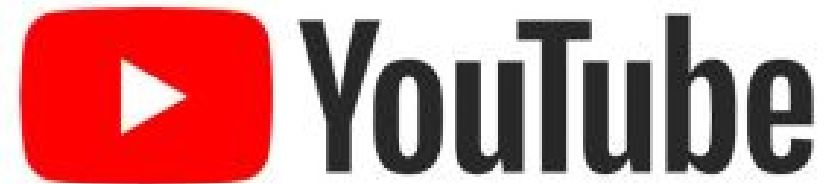
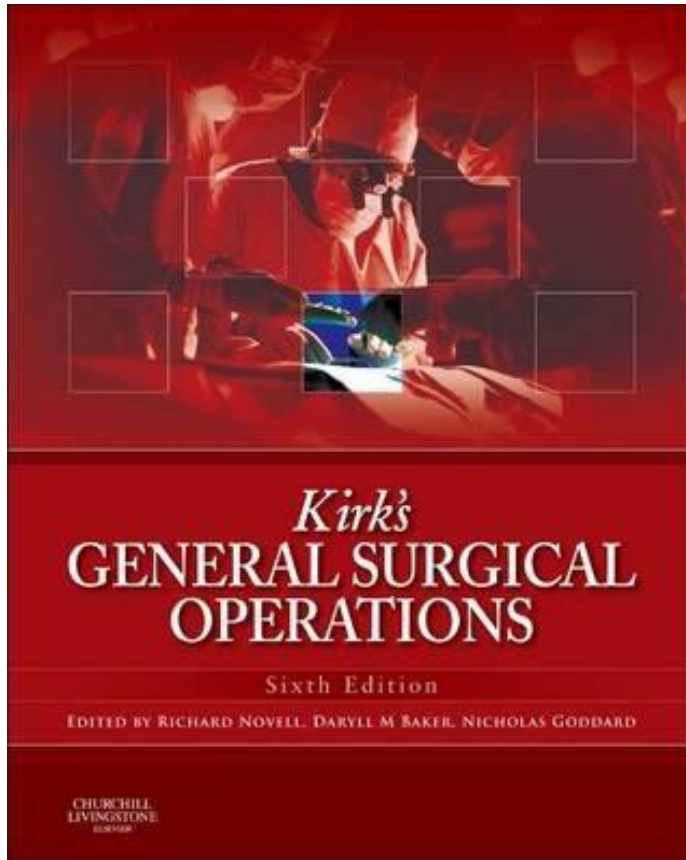
COVID19

- Screening?
- PPE?
- Aerosolising or airway procedures
- Diathermy plume
- Scopes





Know the operation





Before the patient enters

- Team meeting





Pre-op Prep

- Special equipment (implants, energy devices, laparoscopic equipment etc)
- Book radiology
 - **Call them too!**
- Pathology forms
 - **Call the lab if frozen section needed**



Team timeout/pause

Surgical Safety Checklist



World Health
Organization

Patient Safety

A World Alliance for Safer Health Care

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?

Stuff to do while Anaesthetics do their thing

- Calf compressors
- Yellow fins
- Strap
- Catheter
- Diathermy plate
- Gloves





Patient positioning



Some more general tips

- Check with the boss before cranking out your Dirty Dubstep playlist



- Leave your stuff in the anaesthetic bay
- Find out which door to use (sometimes the orthopods don't like it)

A blurred image of a surgical team in an operating room. A person in green scrubs is visible on the left, and surgical lights and equipment are on the right.

Some more general tips

- If you need to leave theatre, don't forget your magic bacterial invisibility gown



- Clean areas and dirty areas



Scrubbing

- Figure out which scrub you prefer chlorhexidine vs povidine vs Skinman (alcohol based)
- Make sure you have a gown open
- Don't forget a mask before you scrub!!





Don't touch the scrub trolley



The Mayo trolley is usually fair game





Principles for assisting

- Make the surgeons job easier
 - **Improve the lighting**
 - **Improve the view**
 - **Clean and clear the operative field**
- Ask questions, clarify if you don't understand or hear an instruction
- Always try to be doing something helpful at any given time.



Principles for assisting

- Pass instruments firmly and as they would be held
- Never obstruct or cross the surgeons field of view
- If you can still feel your hands, you aren't doing it right!!!



Post Op

- Clean the patient
- Paper work
- Help out with bed transfers
- Stay until the tube is out and the anaesthetist is happy!anything can happen



Instruments

- Retractors
- Cutting and dissecting instruments
- Tissue forceps
 - Sprung forceps
 - Hinged tissue forceps and clamps
- Energy devices







Langenbeck Retractor







Czerni or Matthews Retractor







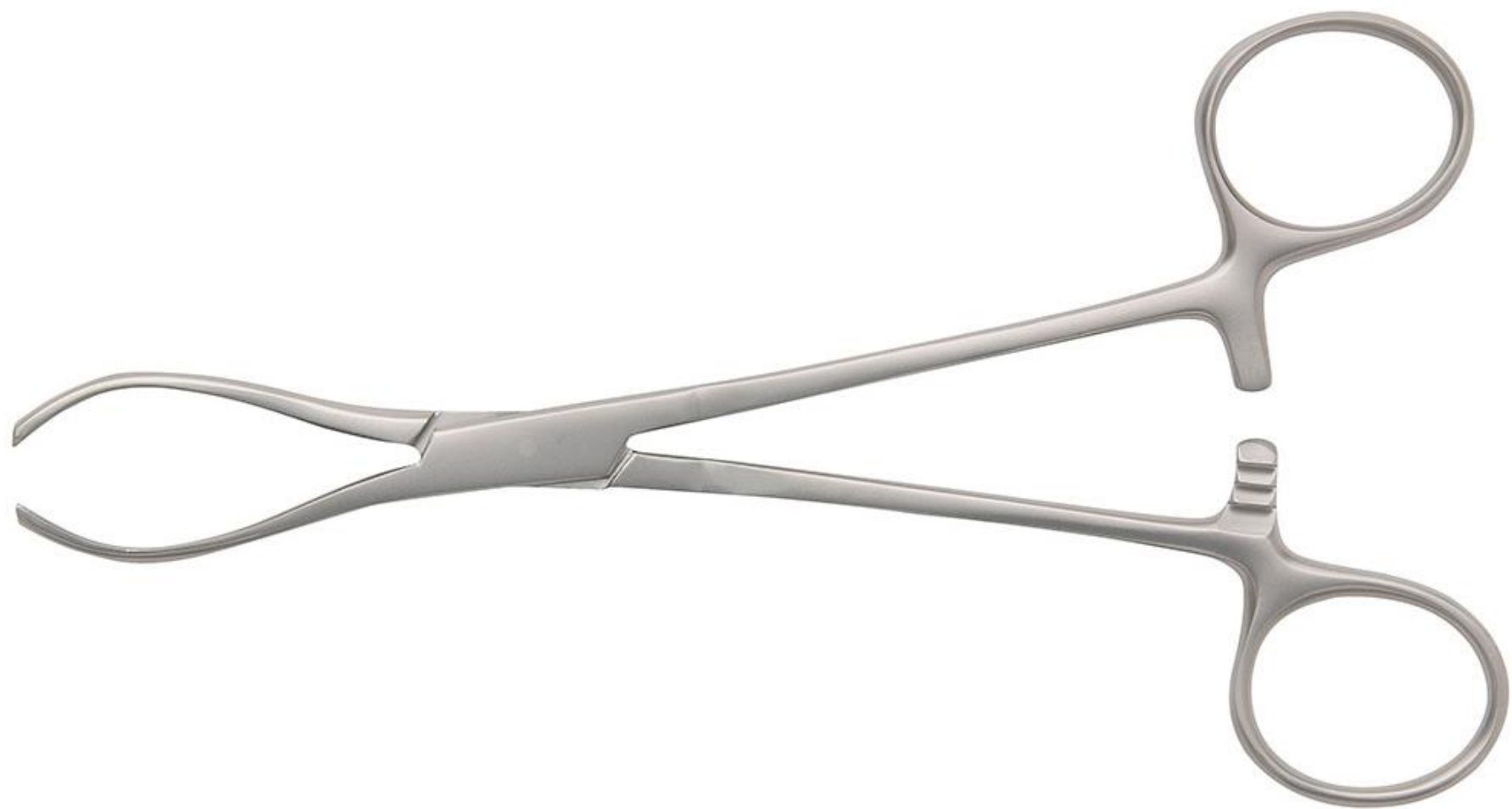
Deaver Retractor





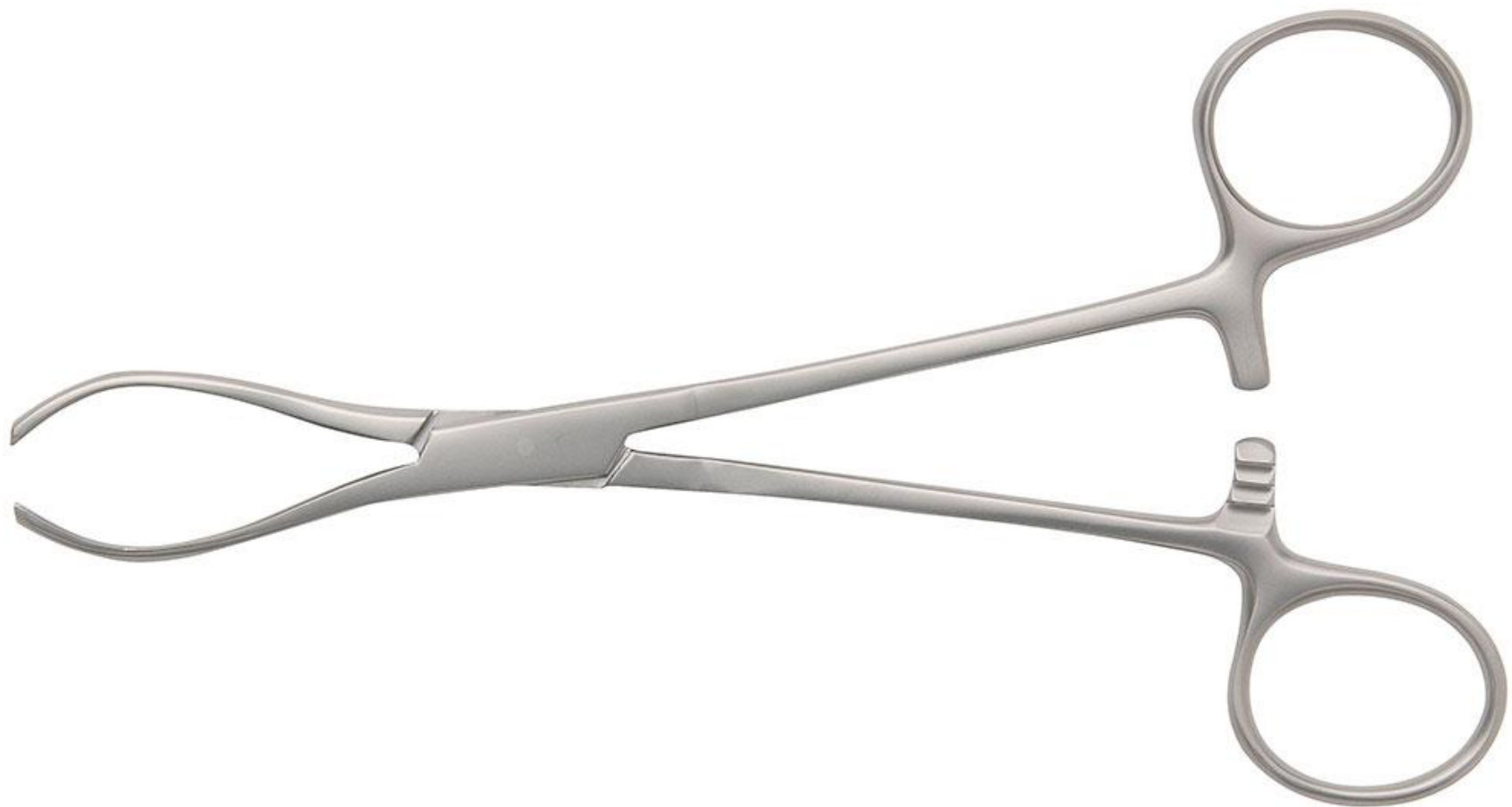
Weitlaner self retaining retractor







**Rutherford-Morrison, Moynihans,
Littlewoods**







**Artery clip, Haemostat, Crile,
Kelly forceps**





Roberts & Harrison's artery forceps







Allis forceps







Babcocks forceps







Right angle, Lahey or Mixters forceps

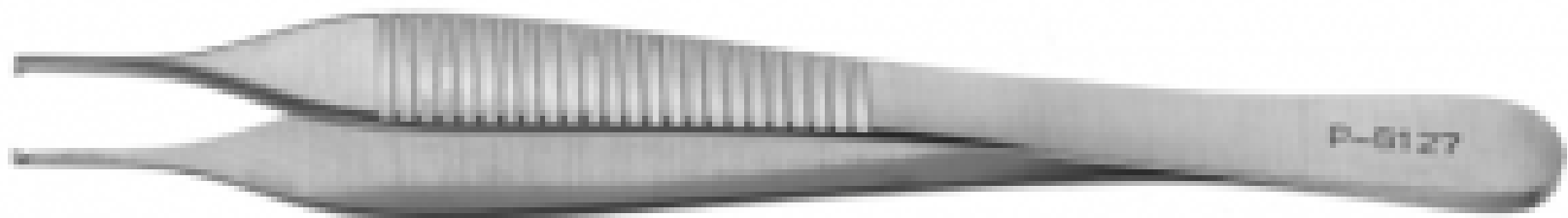




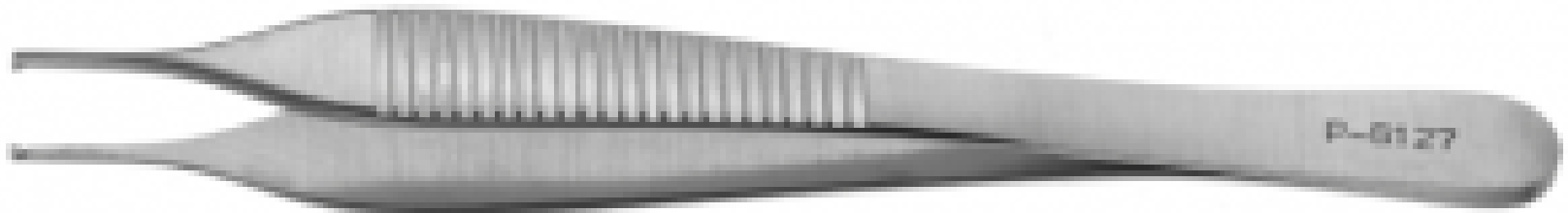


DeBakeys forceps





Adson-Brown toothed forceps







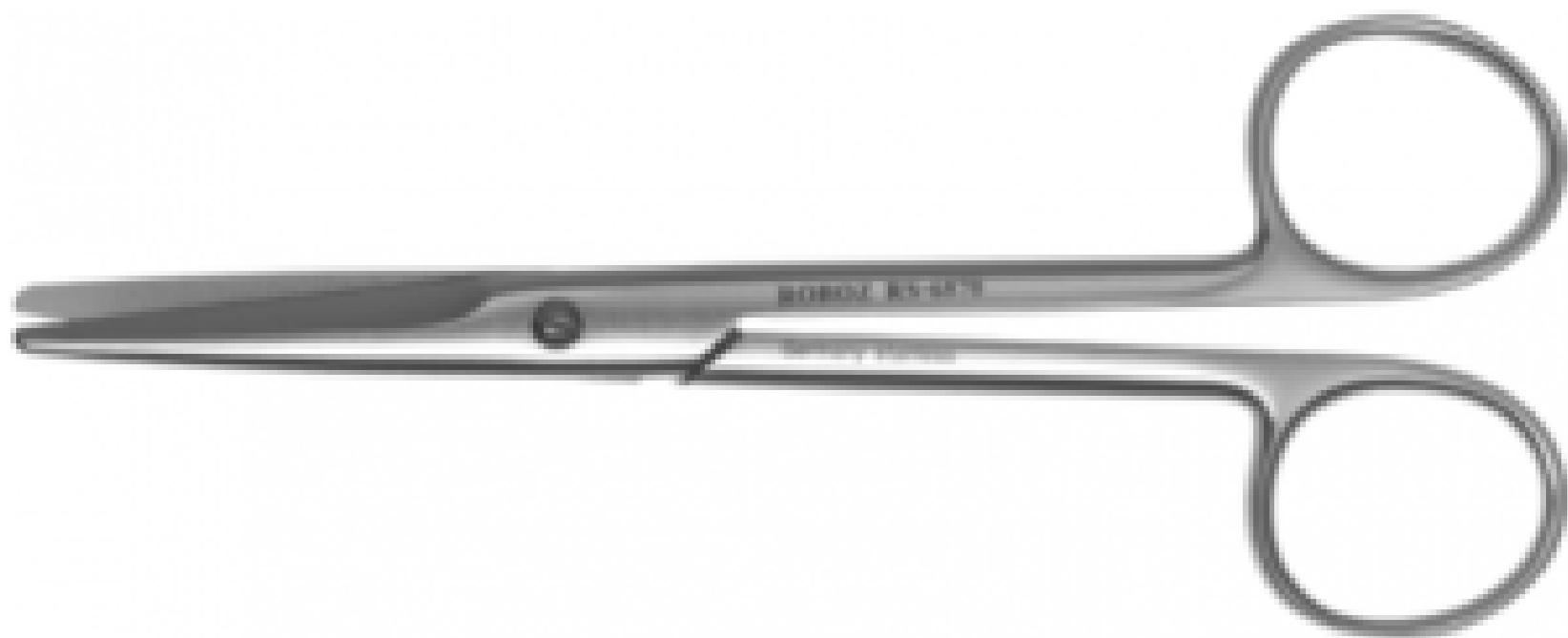
Gillies toothed forceps







No 10 No 10A No 11 No 15





Mayo (suture) Scissors







Mützenbaum scissors ('Metz')







Yankauer Sucker







Pooler or sump sucker







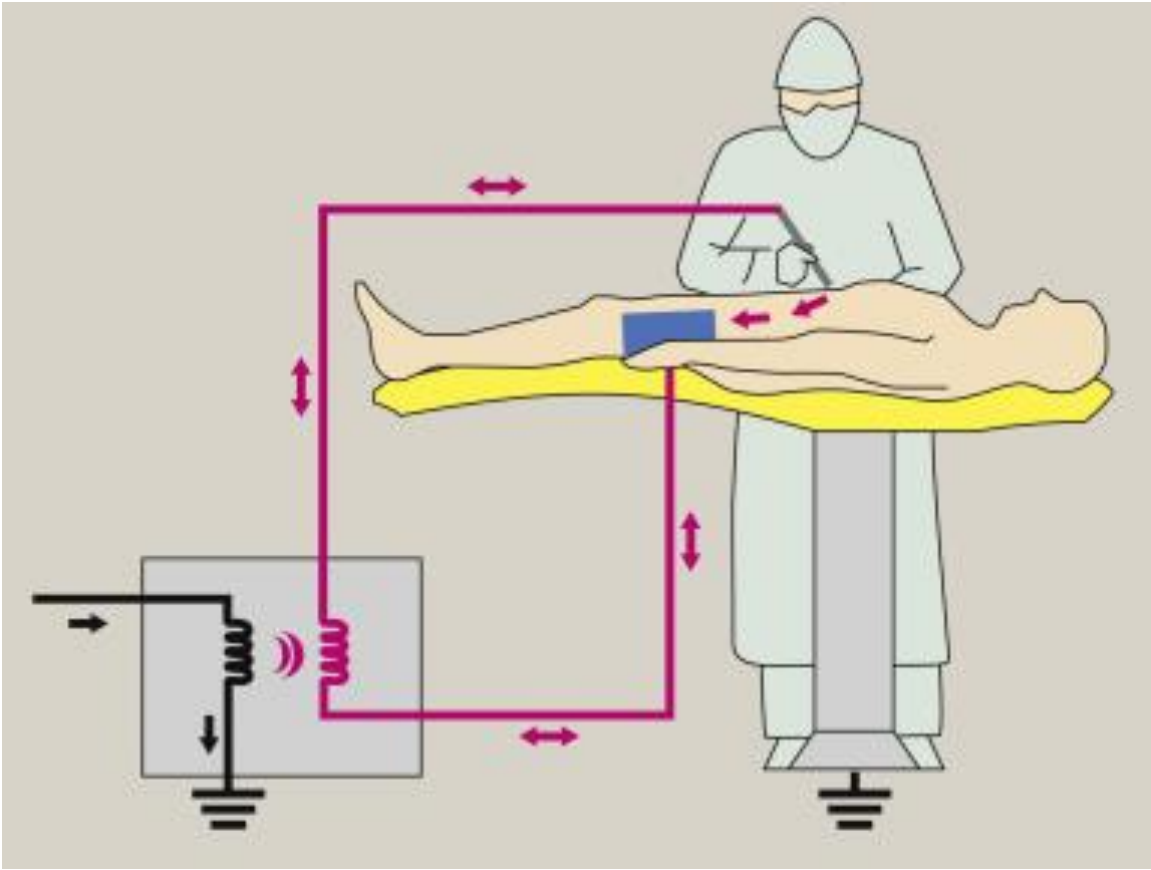
Diathermy

- Monopolar energy device
 - High frequency A.C. electric current
 - Cut or Coagulation
 - Induced thermal injury due to electrical resistance of tissues



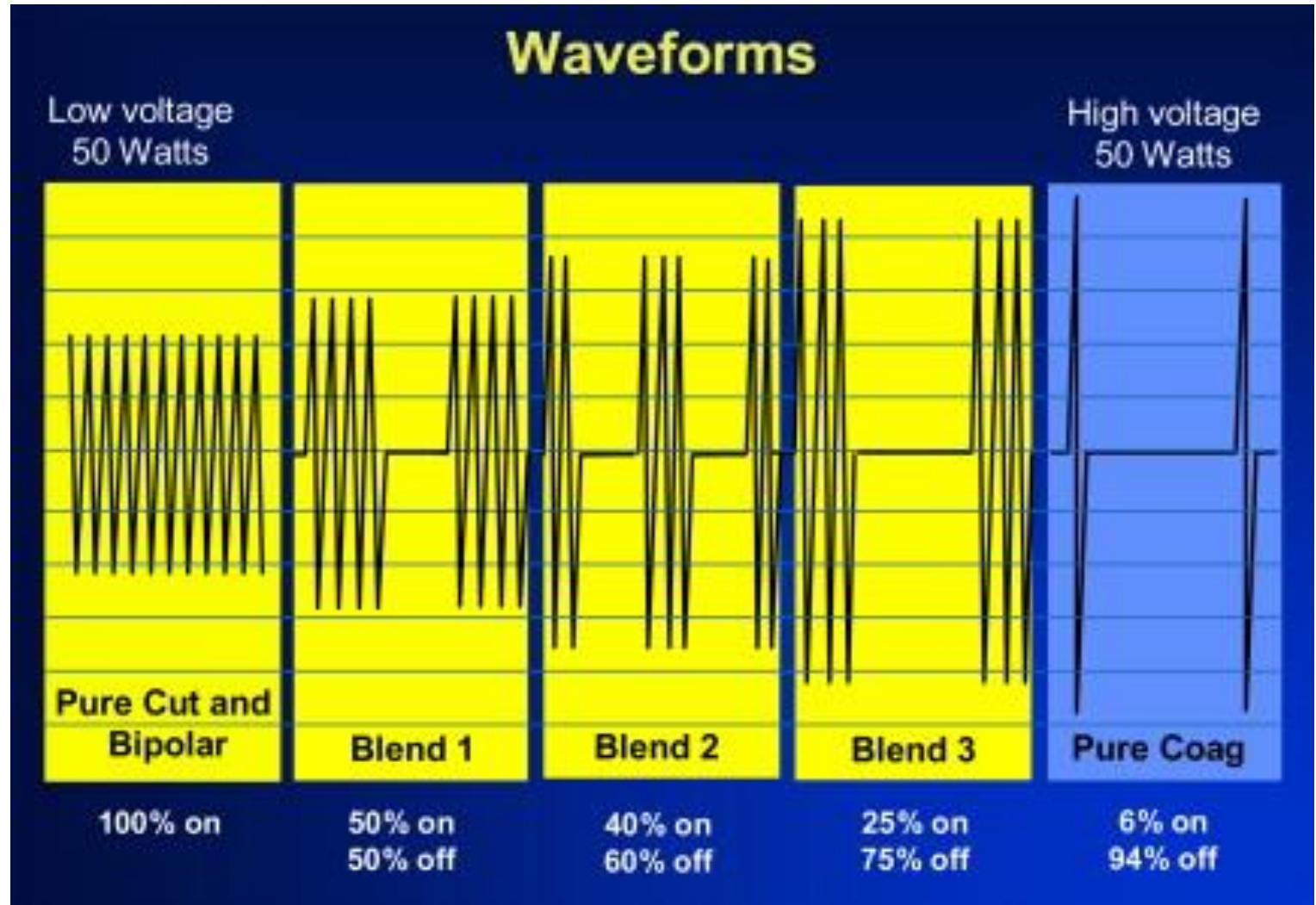


Diathermy Circuit



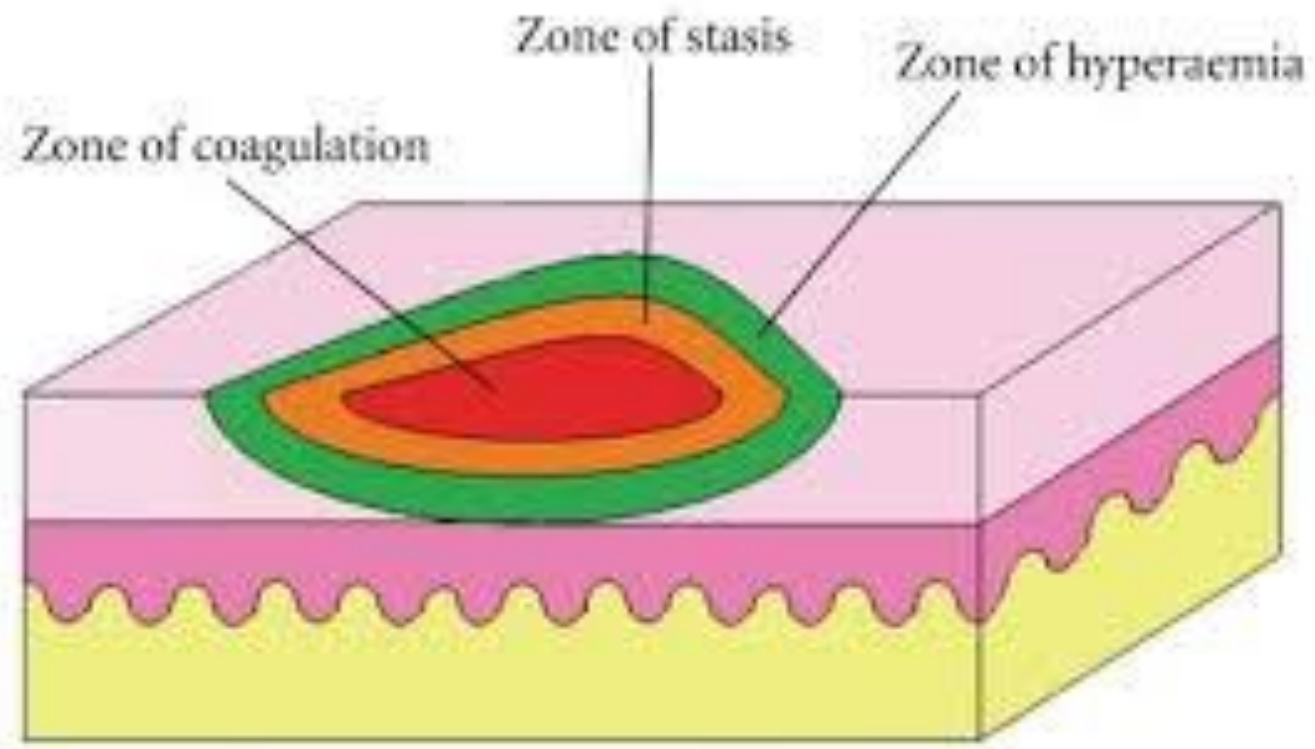


Cut vs Coag





Jacksons model of burns

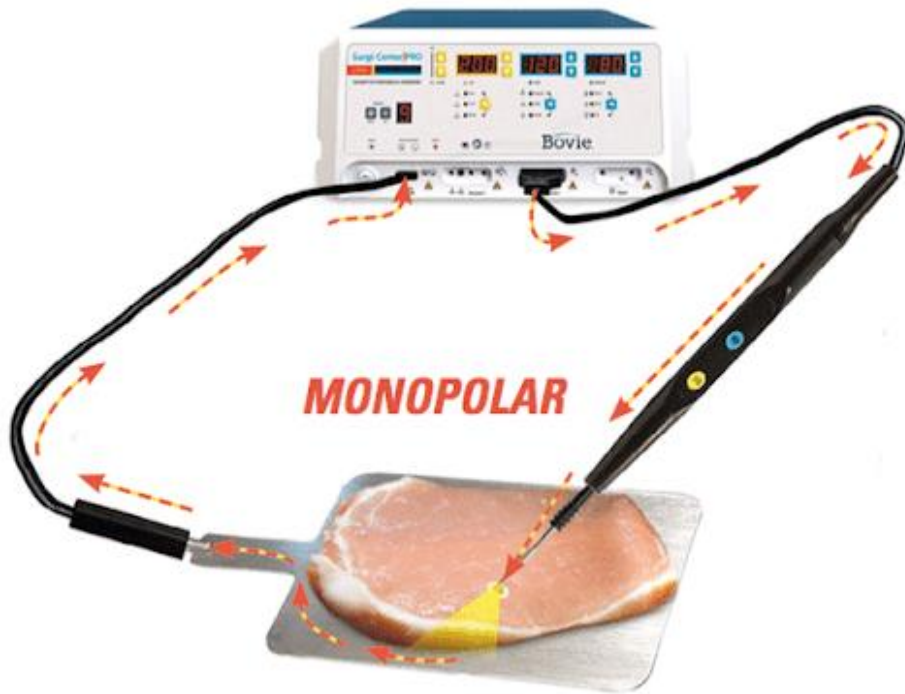




Bipolar



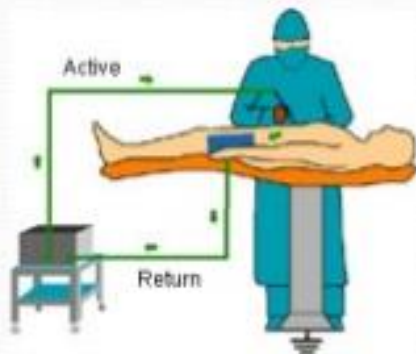
Monopolar vs Bipolar Circuit





Monopolar vs. Bipolar

- Cut/coag
- ↑ dissection
- ↑ current density: ↓ thermal spread
- ↓ “stick”



- ↓ impedance → ↓ voltage → ↓ heat
- no grounding pad
- ↓ coupling
- ↓ smoke
- ↑ hemostasis
- wet OK
- implants OK





Ligasure



LS1020





Harmonic

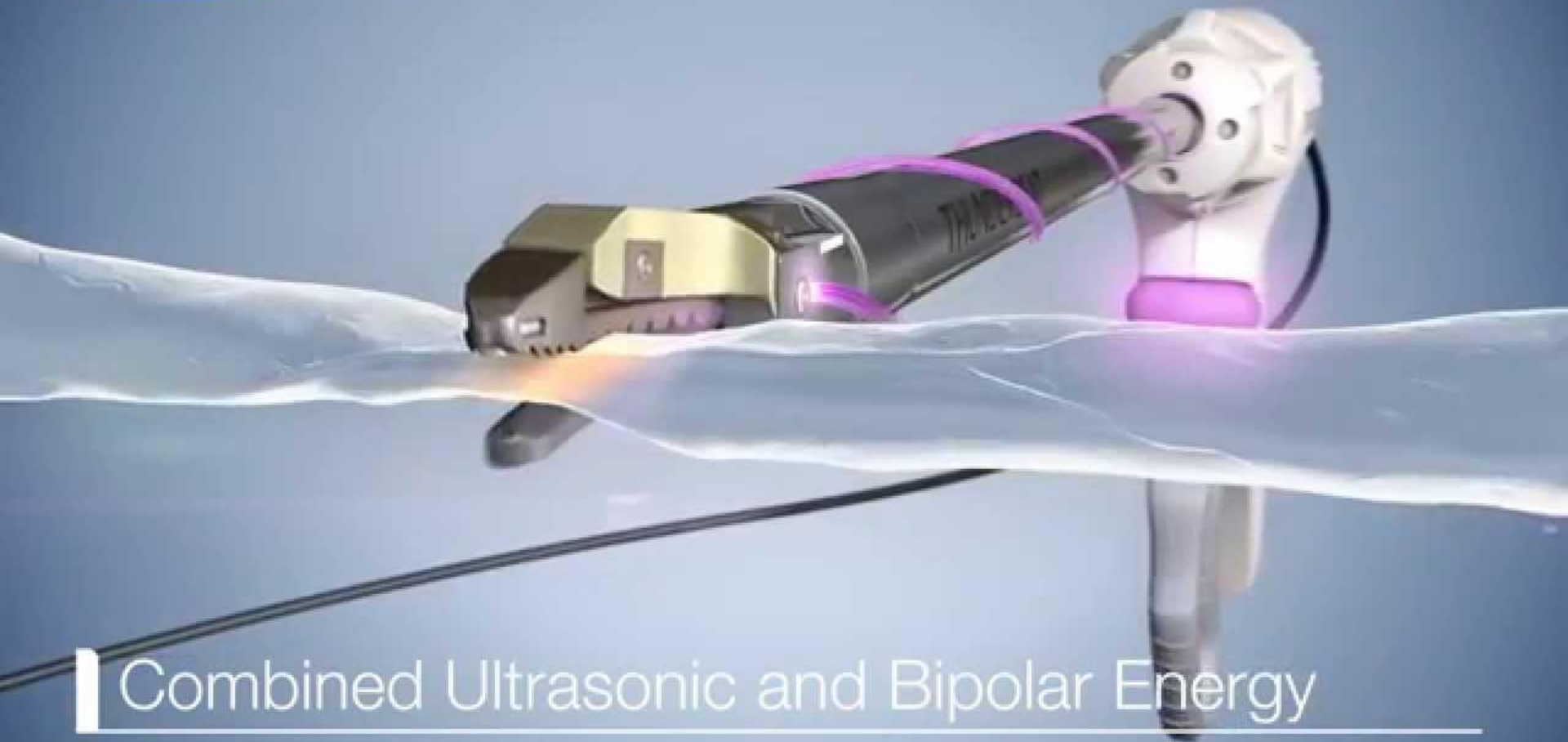




Thunderbeat

OLYMPUS

THUNDERBEAT



Combined Ultrasonic and Bipolar Energy