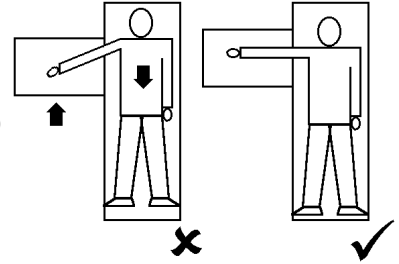


# HAND SURGERY THEATRE REQUIREMENTS

**Caveat** All rings off patient's hand  
All limbs for elective surgery marked

**Skin Prep** Iodine in alcohol. Prep at least 2/3 up forearm  
Must not get underneath tourniquet (causes burns)



**Arm table** Virtually always  
Arm table level with shoulder (diagram)

**Tourniquet** All cases. Exsanguination after skin prep and drawing

**Standard** Upper arm (usually), Forearm (sometimes)  
Pressures Preset and checked before inflation  
280 Adult  
150 - 250 Child (ask)



**S-MART (picture)** Sterile, single use, applied per-operatively (picture)  
Used for dermofasciectomy, cubital tunnel release

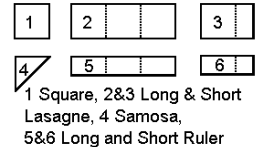
**Finger** Prepared per-operatively from sterile gloves  
Use glove-size appropriate for patient

**Local Anaesthetic** LA cases: 0.5% Marcain (5ml)+ 2% Lignocaine (5ml) (not Chirocaine)  
10ml syringe + long orange needle (25Gx1")  
GA cases: available before skin-closure for all cases if no regional block  
0.5% Plain Marcain in 10ml syringe with orange needle

<b>Instruments</b>	<b>Essential (regular use)</b>	<b>Extra (occasional use)</b>
	Baron scalpel blade with #15 blade Straight tenotomy scissors Neivert needle holder Fine Adson's forceps Fine cats-paw retractors Fine skin hooks Weitlaner self-retaining retractor	Kleinert-Kutz rongeur Fine nerve hook Pulvertaft tendon-weavers Micron forceps Tendon hooks Tendon strippers Microsurgical set

Sutures [Ethicon]	Site	Usual	Occasional
	Skin	5-0 Vicryl-Rapide[9915]	4-0 Monocryl[3205] (eg Donor)
	Fat/fascia		3-0 Monocryl[3207]
	Tendon/Ligament	3-0 Ethibond[6936]	3-0 PDS[9625]
	Microsurgery	9-0 Prolene or Ethilon	

**Other** 10ml syringe with broken-off blue needle  
For cleaning wound during and at end of cases.  
Wounds dressed with moist for dressings (diagram)



**Splints** Scotchcast never Plaster of Paris  
Usually needed if bony work or ligament/tendon repair/reconstruction performed



**Personal** Glove size=7.5, normal type  
Seating with kneel-on chair as available (picture)



# HAND SURGERY THEATRE REQUIREMENTS

<b>Carpal tunnel release (Endoscopic)</b>	Instruments	3M Agee Device + Disposable blade Two synovial elevators Urethral dilators (18 - 22Fr)
	Power tools	Television tower, Light cable
	Sutures	5-0 Vicryl Rapide open and mounted at start
	Dressing	Primapore, Crepe
	Other	0.5% Marcain



<b>Carpal tunnel release (Open)</b>	Instruments	Weitlaner retractor (picture)
	Dressings	Moist gauze (Samosa), Soffban, Crepe

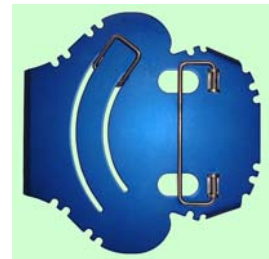
<b>Cubital tunnel release</b>	Instruments	Travers self-retaining retractor Long tenotomy scissors (if available) Travers self retainer
	Tourniquet	SMART
	Sutures	4/0 Monocryl
	Dressings	Primapore, 4" Crepe



**Darrach** (see ulnar head resection)

<b>De Quervain release</b>	Instruments	Normal hand set with fine retractors
	Dressings	Small Mepore & Crepe
	Sutures	5-0 Vicryl Rapide

<b>Dermofasciectomy</b>	Instruments	Martin hand restrainer (picture) Fine nerve hooks
	Tourniquet	SMART
	Sutures	3-0 Silk, 5-0 Vicryl-Rapide for graft 4-0 Monocryl for donor site
	Dressings	Jelonet & Proflavine & wool for graft Moist gauze, Soffban, Scotchcast, Crepe Primapore for donor site



<b>Extensor tendon realignment</b>	Instruments	MacDonald Cerclage wire loops (for tendon retrieval)
	Sutures	3-0 PDS, 5-0 Vicryl Rapide
	Dressings	Moist gauze, Soffban, 3" Scotchcast, Crepe

<b>Extensor tendon reconstruction</b>	Instruments	Kleinert-Kuntz nibblers if rheumatoid for synovectomy Pulvertaft tendon weavers, Micron clip
	Sutures	3-0 Ethibond, 5-0 Vicryl Rapide
	Dressings	Moist gauze, Soffban, Scotchcast, Crepe
	Other	±Swanson drain (ask)

<b>Fasciectomy</b>	Instruments	Martin hand restrainer (see diagram) Fine nerve hooks
	Sutures	5-0 Vicryl Rapide
	Other	Moist gauze, Soffban, Scotchcast, Crepe

<b>Fasciotomy (needle)</b>	Instruments	White hypodermic needle
	Tourniquet	None
	Sutures	None
	Other	Primapore

<b>Flexor tendon repair</b>	Instruments	Lead hand Fine nerve hooks
	Sutures	3-0 + 6-0 Prolene, 5-0 Vicryl Rapide
	Dressings	Moist gauze, Soffban, Wool, Crepe

# HAND SURGERY THEATRE REQUIREMENTS

<b>Flexor tendon graft Stage-I</b>	Instruments	Lead hand Fine nerve hooks Watson-Cheyne ± Beaver blades	
	Sutures	3-0 Ethibond	
	Dressings	Moist gauze, Soffban, Wool, Crepe	
	Other	Silastic rod (2-4mm available)	
<b>Flexor tendon graft Stage-II</b>	Instruments	Lead hand Fine nerve hooks + tendon hook Tendon stripper Watson-Cheyne, Pulvertaft tendon weavers Adjustable self-retainer	
	Sutures	3-0 Ethibond,	
	Dressings	Moist gauze, Soffban, Wool, Crepe	
<b>Flexor tenolysis</b>	Instruments	Lead hand Watson-Cheyne ± Beaver blades Fine nerve hook, tendon hooks	
	Dressings	Moist gauze, Soffban, Crepe	
	Note	Can turn into Stage-I tendon graft	
<b>Finger &amp; thumb fusion</b>	Instruments	K-wires (all joints) Cerclage wires (PIPJ, thumb MCPJ) Special wire-bender and wire-cutter 18-Gauge Drip cannula (grey Venflon) (PIPJ, thumb MCPJ) Mitchell trimmer, Dental pusher	
	Power tools	Micro-Air or E-PEN + fine saws	
	Sutures	3/0 Ethibond, 5/0 Vicryl-Rapide	
	Dressings	Adaptic for fingers Moist gauze, Soffban, Crepe for thumb Scotchcast	
<b>Ganglion removal</b>	Instruments	Lead hand (palm, anterior finger, anterior wrist), Fine rongeur	
	Sutures	5/0 Vicryl-Rapide	
	Dressings	Moist gauze, Soffban, Crepe (wrist and palm) Adaptic (finger)	
<b>Limited carpal fusions</b>	Instruments	Rongeurs, Mitchell trimmer K- wires, special wire-bender and wire-cutter Tendon hooks, Self retainer Bone graft instruments (probably trephine)	
	Power tools	Micro-Air Image intensifier	
	Other	Green needle	
	Sutures	3-0 Ethibond, 5-0 Vicryl Rapide	
	Dressings	Moist gauze, Soffban, Scotchcast, Crepe	
<b>Littler &amp; Eaton</b>	(see thumb stabilisation)		
<b>MCPJ arthroplasty (Ascension)</b>	Implants	Ascension <u>PIPJ set</u> and implants to be available Also need silastic equivalents (eg. Swanson) for salvage	
	Instruments	Kleinert-Kuntz nibblers, McDonald dissector Tendon/nerve hooks, sharp bone hook	
	Power tools	Micro-Air or E-PEN	
	Sutures	3-0 PDS, 5-0 Vicryl Rapide	
	Dressings	Moist gauze, Soffban, Crepe, Scotchcast	
	Other	Irrigation cannula	



# HAND SURGERY THEATRE REQUIREMENTS

## MCPJ arthroplasty (Swanson)



Implants	Check prosthesis stocks <u>before</u> start
Instruments	Kleinert-Kuntz nibblers, McDonald dissector Tendon/nerve hooks, sharp bone hook Heavy needle holder for holding prostheses
Power tools	Micro-Air or E-PEN with a decent selection of burrs
Sutures	3-0 PDS, 5-0 Vicryl Rapide
Dressings	Moist gauze, Soffban, Crepe, Scotchcast
Other	Trial prostheses, Irrigation cannula Swanson Drain

## Nerve graft

Instruments	Microsurgical set Wooden board, tongue spatula + Razor blade
Donor area	Leg for sural nerve (ask)
Sutures	8-0 or 9-0 Prolene tapercut
Dressings	Moist gauze, Soffban, Crepe, ±Scotchcast
Other	Microscope

## Opponensplasty

Instruments	Micron artery forcep
Sutures	3-0 PDS, 5-0 Vicryl Rapide
Dressings	Moist gauze, Soffban, Scotchcast, Crepe

## ORIF

Instruments	Mini-Fragment set and/or K- and Cerclage wires Special wire-bender and wire-cutter, Mitchell trimmer
Power tools	Micro-Air
Dressings	Adaptic for fingers: Moist gauze, Soffban, Crepe for thumb Scotchcast

## Palmar synovectomy

Instruments	Lead hand, Kuntz-Kleinert rongeurs, Adjustable self-retainer, Tendon hooks
Dressings	Moist gauze (Samosa), Soffban, Crepe

## PIPJ arthroplasty (Ascension)



Implants	Ascension <u>PIPJ set</u> and implants to be available Also need <u>silastic</u> equivalents (eg. Swanson) for salvage
Instruments	Kleinert-Kuntz nibblers
Power tools	Micro-Air + fine saws
Sutures	3-0 Ethibond, 5-0 Vicryl Rapide
Dressings	Moist gauze, Soffban, Crepe, Scotchcast
Other	Irrigation cannula

## PIPJ arthroplasty (Swanson)



Implants	Check prosthesis stocks <u>before</u> start
Instruments	Kleinert-Kuntz nibblers Lead hand if anterior approach (ask)
Power tools	Micro-Air or E-PEN + fine saws
Sutures	3-0 Ethibond, 5-0 Vicryl Rapide
Dressings	Moist gauze, Soffban, Crepe, Scotchcast
Other	Irrigation cannula

## Ray amputation

Instruments	Self-retainer, towel clip, Bone hook, MacDonaldsx2
Power tools	Power saw may be needed
Suture	3-0 Vicryl
Dressings	Moist gauze, Soffban, Crepe

## Sauve-Kapadji

Instruments	Small Fragment set (incl K-wire) 2xMacDonalds, Self-retainer
Power tools	Power saw & drills Image Intensifier
Sutures	4-0 Monocryl,
Dressings	Moist gauze, Soffban, Crepe

# HAND SURGERY THEATRE REQUIREMENTS

<b>Scaphoid non-union</b>	Instruments	Acutrak screw system and K- wires Rongeurs, Mitchell trimmer, Self retainer Bone graft instruments
	Power tools	Image intensifier
	Sutures	3-0 Ethibond, 5-0 Vicryl Rapide
	Dressings	Moist gauze, Soffban, Scotchcast, Crepe
<b>Sesamoid fusion</b>	Power tools	Micro-Air
	Other	2x16-Gauge drip cannula, Dental wire
	Sutures	2-0 PDS, 5-0 Vicryl Rapide
	Dressings	Moist gauze, Soffban, Crepe, 3" Scotchcast
<b>Skin Graft</b>	Sutures	3-0 or 4-0 Silk and 5-0 Vicryl-Rapide on cutting needles 4-0 Monocryl (donor)
	Dressings	Jelonet, Flavine-wool
<b>STT fusion</b>	Instruments	Rongeurs, small self retainer K- wires, special wire-bender and wire-cutter Bone graft instruments (probably trephine)
	Power tools	Micro-Air or E-PEN Image intensifier
	Sutures	3-0 Ethibond, 5-0 Vicryl Rapide
	Dressings	Moist gauze, Soffban, Scotchcast, Crepe
<b>Swan neck correction</b>	Instruments	Tendon hook
	Other	Dental wire (for tendon retrieval)
	Sutures	4-0 Ethibond, 5-0 Vicryl Rapide
	Dressings	Adaptic + Scotchcast (single digit) Moist gauze, wool, crepe, Scotchcast (multiple digits)
<b>Syndactyly</b>	Sutures	5-0 Vicryl-Rapide, 4-0 Monocryl for donor
	Dressings	Jelonet & Proflavine wool for graft Moist gauze, Soffban, 2-3" Crepe Primapore for donor
<b>Thumb ulnar collateral (UCL) ligament repair</b>	Instruments	Grey Venflon x 2 (for suture passage) Small self-retainers
	Power tools	Micro-Air or E-PEN
	Sutures	3-0 Ethibond, 3-0 Monocryl, 5-0 Vicryl Rapide
	Dressing	Moist gauze Soffban, Scotchcast (3"), Crepe
<b>Thumb stabilisation (Littler &amp; Eaton)</b>	Instruments	Two MacDonald elevators, Kleinert-Kuntz nibblers Weitlaner retractor (picture), Cerclage wire loops
	Power tools	Micro-Air or E-PEN
	Sutures	3-0 Ethibond, 5-0 Vicryl Rapide
	Dressing	Moist gauze, Soffban, Scotchcast (3"), Crepe
<b>Trapeziectomy</b>	Instruments	2 MacDonald elevators Kleinert-Kuntz nibblers Weitlaner retractor (picture)
	Power tools	Micro-Air or E-PEN + saw
	Sutures	3-0 Ethibond, 5-0 Vicryl Rapide,
	Dressing	Moist gauze, Soffban, Scotchcast (3"), Crepe
<b>Trigger finger release</b>	Instruments	Lead hand only if GA
	Sutures	5/0 Vicryl-Rapide
	Dressings	Moist gauze (short roll), Soffban, 3" Crepe



# HAND SURGERY THEATRE REQUIREMENTS

<b>Ulnar head resection (Darrach)</b>	Instruments	Kleinert-Kuntz nibblers Two McDonalds, Bone hook
	Power tools	Micro-Air or E-PEN
	Sutures	3-0 Ethibond, 5-0 Vicryl Rapide
	Dressings	Moist gauze (Square), Soffban, Crepe
	Other	±Swanson drain (ask)
	Note	Be prepared for extensor tendon reconstruction (see above)

<b>Ulnar osteotomy</b>	Instruments	Small fragment set Osteotomy guide plates x 4 (picture) 5-hole DCP, Self retainer 2x MacDonalds
	Power tools	Power saw & drills (AO fittings) [E-PEN] Image intensifier
	Sutures	4-0 Monocryl
	Dressings	Moist gauze, Soffban, Scotchcast, Crepe



<b>Wrist Arthroscopy</b>	Set-up	The arm suspended via “Chinese” finger traps” attached to a chain suspended from the theatre light. Table placed with the hand precisely under the chain. <u>No arm table</u> 2-3Kg weight + sling around upper arm
	Other Instruments	Disposable elasticated arm drape #11 blade Arthroscope (scope + sleeves + trocars) Angled probe, suction punch
	Fluids	Green needlesx2, Saline in bowl on trolley Fine giving set (Leuer lock) + 50ml Syringe
	Power tools	Television (Mechanical muncher + disposables if requested)
	Sutures	None
	Dressings	Moist gauze (square), Soffban, Crepe



<b>Wrist denervation</b>	Instruments	Self-retainer
	Sutures	4-0 Monocryl, 5-0 Vicryl Rapide

<b>Wrist fusion (open)</b>	Instruments	<u>Synthes wrist fusion set</u> Bone graft set (ask) Rongeur
	Power tools	Power saws and drills (AO fittings) [E-PEN] Image intensifier
	Sutures	0 Vicryl & 4-0 Monocryl for iliac crest (if used) 3-0 Ethibond, 5-0 Vicryl Rapide for hand
	Dressings	Moist gauze, Soffban, Crepe, Scotchcast
	Other	Fenestrated drape for iliac crest 0.25% Marcain + Adrenalin for iliac crest

<b>Wrist fusion (closed)</b>	Instruments	<u>Stanley pin set</u> (picture) Steinman pin introducer
	Power tools	Image intensifier
	Sutures	5-0 Vicryl
	Dressings	Primapore Soffban, Crepe, Scotchcast



<b>Wrist stabilisation (ECRL)</b>	Instruments	Grey Venflon (for suture passage)
	Power tools	Micro-Air drill with burr attachments
	Sutures	5-0 Vicryl, 2-0 or 3-0 PDS
	Dressings	Soffban, Crepe, Scotchcast