

1. List of surgical entities relating to section or orthopedics:

Simple Fractures  
Compound Fractures  
Special Fractures, Spine, pelvis, femoral neck, cervical spine  
Amputations: Elective flap, delayed flap, guillotine  
Drainage of joints  
Joint fusion (arthrodesis)  
Joint excision  
Joint aspiration  
Arthroplasty  
Operations for internal derangements of joints, semilunar cartilage  
Joint mouse removal  
Joint adhesions (manipulation under anesthetic)  
Wound excision  
Wound incision  
Bone grafting, long bones (rigid grafts - onlay or inlay)  
Spine fusion, lumbar or dorsal, (chip or shavings grafts - rigid grafts)  
Spine fusion, cervical (graft plus wiring)  
Tendon operations (tenotomy, lengthening, transplanting, repairing, drainage)  
Reconstructive operations (hip mainly)  
Plastic procedures (especially of toes and feet, ie hammer toes, bunions, ingrowing nails, soft corns, etc.)  
Osteotomy  
Tumors of bone, malignant and benign  
Nonunion of bone  
delayed union of bone  
Neurectomy (for spastic conditions, etc.)  
Scalenus anticus syndrome  
Laminectomy  
Intervertebral disk protrusions  
Bone lengthening and bone shortening

2. The following is a list of operations which may be handled by the orthopedic section. They will, in many cases, be the same as was noted on the list of surgical entities.

Closed reduction of fractures and dislocations  
Open reduction of fractures and dislocations  
Internal fixation of fractures  
Open operation, (plates, screws, wiring, bone grafting, bone suturing.)  
Blind pinning  
Amputations (these vary greatly with the size of the amputated part)  
Guillotine, delayed flap, elective flap.  
Incision and drainage of joints (infected)  
Excision of Joints (severely damaged or infected with TB etc.)  
Fusion of Joints (arthrodesis - for hopelessly damaged or diseased joints)  
Arthroplasty  
Semilunar cartilage removal (and other ops. for int. derangements of joints)  
Removal of joint mice.  
Manipulation of joints  
Excision of wounds (battle injuries, compound fractures)  
Incision of infected wounds, gas gangrene, etc.  
Bone grafting (for non-union) long bones. Only or inlay rigid grafts.  
Fusion of cervical spine

Fusion of dorsal and lumbar spine (rigid graft - chip or shavings grafts)

Tendon repair

transplant

lengthening

division

Sheath drainage

Hip reconstructions, shelves, etc.

Plastic bunion operations

hammer-toe operations

bunionette op

soft corn op

5th toe corn op

ingrown toe nail op

Osteotomy

Bone lengthening and shortening

Tumors of bone

Local resection

Radical resection

Amputation

Drilling of bone (for delayed union, etc.)

Neurectomy, tibial, obturator (for spastic conditions)

Scalenus anticus section

Intervertebral disk excision

Laminectomy

Mention of all the individual operations would simple involve copying the table of contents of Campbell's operative orthopedic text.

### 3. Basic Instrument Set:

All operations involving work with bone will require this basic set of instruments.

Note: Some items, such as tourniquets, retractors, etc. will depend on the location of the operation and the extent of the procedure to be done. Obviously, too, an osteotome 3/4" wide will have no possible use in an osteotomy of the proximal phalanx of a finger; in other words, some judgment must be used in interpreting any list such as this. This list will not include items of equipment which would normally be present in any general operating set -- only such instruments and other pieces of equipment which might possibly be omitted and which are necessary to the procedure are in the list.

3 sharp osteotomes 3/4", 1/2", and 1/4" widths. One narrower one for small operations

1 sharp Gouge 1/2" (1/4" for small jobs)

2 periosteal elevators 1/2" width (1/4" for small bones) one curved, one straight

1 Ochsner forceps 8" heavy (for grasping bone fragments)

2 Towel forceps, large, heavy, (for grasping bones)

2 Bone curettes (size to depend on size of bone) must be sharp

2 Ronguer forceps (size depends) 1 straight, 1 curved

2 bone cutting forceps (size depends) straight and curved

2 sharp retractors of proper size (rake type)

2 special retractors (for prying soft tissues back from bone)

1 Wooden or copper mallet

Operations involving internal fixation of bone

Use of the fracture table will be necessary for many bone operations if either the post-operative cast will require it, or control of the bone during the operation requires it.

1 hand drill

1 drill assortment 1/4" to 1/32"

Flexible stainless steel wire

Soft flexible silver or alloy wire (for treading sutures through holes, etc.)

Kangaroo tendon

Supply of vitallium or 18-8 stainless steel screws, plates, nails etc.

(this item will often have to be arranged specially in advance)

1 plate holding bone clamp

2 lion jaw bone holding forceps

1 screw driver

#### 4. Instrument set-up for special orthopedic operations

##### Small foot plastics

6 Halstead mosquito forceps

2 small sharp curets

1 small sharp osteotome

1 small sharp gouge

2 small scalpels

2 small dissecting scissors

2 small tissue forceps, 1 toothed, 1 plain

1 Martin bandage

1 small sterile rubber tube for tourniquet on toes, etc.

small needles, needles holders.

Silk

##### Amputations

3 scalpels

6 Ochsner forceps, 7 inch

6 Kelly forceps

6 Rankin forceps

1 Martin bandage

1 Esmarch tourniquet

1 hand bone saw

1 periosteal elevator

1 bone rasp or file

1 bone rongeur

1 bone cutting forceps

2 large toothed retractors

2 large ribbon retractos

1 syringe for alcohol

2 dissecting scissors

2 large toothed forceps

needle holders

needles

### Section of anterior scalene muscle

Narrow, deep, smooth retractors,  $\frac{1}{2}$  to  $\frac{1}{4}$  inch wide  
Assortment of aneurysm needles

### Skeletal traction

Kirschner wire outfit

1 spreader with wrench

Supply of wires

1 wire drill

1 sharp pointed scalpel

1 wire cutter

Supply of small corks for covering ends of wire

Gauze dressings

Skin prep to be of mercresin and alcohol

1 traction outfit of ropes, pulleys, weights, etc.

Collodion

### Pin traction outfit

1 drill with chuck which holds pins

1 assortment stinemann pins

1 sharp pointed scalpel

1 skin prep outfit: applicators, mercresin, alcohol

1 mallet

1 supply corks for pin ends

Dressings of gauze

Collodion

Traction outfit, - wires, pulleys, ropes, weights, etc.

### Joint fusions

Combine general bone set with bone graft set up if necessary. Special operations for feet, wrist, etc., will require small instruments.

### Tendon operations

Allis forceps

Drills for implanting tendon into bone in certain cases

6 curved mosquito forceps

General operating set up otherwise

### Bone graft

Regular bone set

Electric saw with 2 circular saw blades on shaft

Drill and outfit as for internal fixation set up.

### Spinal fusion

Basic bone set

One special curved osteotome

Wire, pliers, wire cutters

2 Adson laminectomy retractors

Casts following operations:

Sterile stockinette

Sheet wading

Felt

3 inch gauze bandage

Felct Scissors

Assorted 8 to 4 inch plaster bandages, in sufficient quantity

Box of dry, powdered plaster of Paris

Supply of small sticks for use as struts, etc., as in large spica casts

2 sharp plaster knives

2 indelible pencils

Buckets, water, salt, gloves