

Facilitator Guide to Surgical Instrument Pictures for Cesarean Surgical Procedure

#1 **Allis clamp**: Used to perform a “pinch” skin test to determine numbness prior to start of surgery, used for AROM once bag is seen through incision, used to hold intestinal; delicate structures

2. **Knife handle**-(separate scalpel blade is attached):

Used to make incision in skin, uterus

#3. **Curved Kelly**: aka hemostats, tags, snaps. Used for hemostasis, esp. vessels in subcutaneous tissue, holds heavier abdominal tissue

#4. **Straight Kelly**: aka hemostats, tags, snaps. Used for hemostasis-esp. vessels in subcutaneous tissue, holds heavier abdominal tissue

#5. **Richardson retractor** aka “Rich”-Large, Medium, and Small: used to hold tissue (e.g. skin, adipose, fasciia) out of the way, keeps abdomen open

#6: **Forceps**, aka “pick ups”: used to grasp tissue

#7: **Kocher**: clamps used to hold fascia (to retract)-note the tooth and notch on the tips

#8: **Pean**: used to clamp umbilical cord

9: **Bandage Scissor**: used to extend the uterine incision, cut the umbilical cord

10 **Bladder blade**: used to protect the bladder and retract the lower part of the abdominal incision

11 **Goulet** : a retractor

#12 **Army Navy**: a retractor

#13 **Long Ring Forcep**: used with gauze e,g, 4x4 to absorb blood from site, or to clamp such as membranes with placenta removal

14. **Penningtons**: a rarely used clamp for heavy tissue-distinctive triangle shaped tips

#15 **Babcocks**: a clamp in a special shape for holding fallopian tubes

16 **Metzenbaum scissors**: for snipping delicate tissue such as the peritoneum

#17 **Russian**: a special type of tissue pick-up, note the shape and pattern of the “teeth”

#18 **Needle Driver**: holds needle for suturing

19 **Curved Mayo Scissor**: used to cut heavy/ tough tissue (fascia)

20 **Straight Mayo Scissor**: used to cut suture

#21 **Pickup with teeth**: for grasping tissue

#22 **Addisons**: a narrow tipped tissue pick-up used to pull the edges of the incision together for closure

#23 **Bovie Electro Cautery tip**: for cauterizing bleeding tissues. Note: fire risk with proximity of Chlorhexadine prep, this is why prep must dry for 3 minutes prior to draping

24 **Scratch Pad**: used with Cautery tip for removing burnt matter buildup

25 **Yankauer suction tip**: To remove fluids including amniotic fluid, irrigation fluid, blood

26 **Poole suction tip**: used over incision to remove fluid when irrigated

#27 Comparison picture of scissor types

#28 Comparison picture of three main clamps: Kelly, Pean, Kocher

After the patient is prepped and draped, the surgeon uses an Allis clamp to pinch the patient's skin down near where the incision will be cut to assess for numbness.

If the patient is adequately anesthetized, the skin incision is made with the scalpel (knife handle with blade attached).

As the subcutaneous tissue (including adipose layer) is separated, Kelly clamps are used to hold tissue and with the cautery tip for bleeding small vessels.

When the fascia is reached, it may be scored with the scalpel or with the cautery tip. Kochers are used to hold the fascia to expose the linea alba in the center of the rectus muscle which is then dissected. Tissue layers in the abdomen may be held up with tissue forceps (pick-ups). Blunt dissection of layers, particularly the rectus muscle, is often done with the surgeon's fingers. The peritoneal or muscle layer may be cut with Metzenbaum scissors.

Once the uterus is exposed the bladder blade is put in place. The scalpel is used to cut a small line in the uterus. The small opening may be extended with bandage scissors. When the bag protrudes through this opening it may be "popped" with an Allis clamp. The head is pushed up into the incision by the assistant leaning on mom's upper abdomen.

Once the baby's body is delivered to the maternal abdomen, Peans are used to clamp the umbilical cord, bandage scissors to cut it.

The placenta is then manually removed. A Ring forcep may be used to grasp membranes. A wet lap sponge is used to clean the uterine wall.

Occasionally the surgeon will exteriorize the uterus, placing it on the maternal abdomen, suturing it, and then putting it back in.

The needle driver is then used to suture the uterus closed in two layers. Kellys are used to manipulate the uterus.

A count is done at this time.

Next is irrigation of the cavity; saline helps clots form and float to the top so they can be removed with suction or wet lap sponges.

The peritoneum is closed, then the rectus muscle is approximated and the lower portion is sutured with an interrupted stitch to allow movement.

Kochers are used to lift tissue, look for bleeding vessels.

A retractor is used to look for the apex of the fascia, this is also closed with two layers of suture. It is important that the fascia be securely held together.

A tissue forcep is used to hold subcutaneous layer for closure, small needle driver is now used. At the skin level, Addisons are used to bring the edges together for closure (suture, staples, glue).