

## An Introduction to Surgical Instruments in the Operating Theatre

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The operating theatre can be an intimidating environment for Foundation Doctors and Medical Students, even if they are interested in surgery. A prerequisite level of knowledge is required before active participation is possible, which is crucial to access learning opportunities. Initially, junior assistants are often tasked with retraction using a Langenbeck, but good performance here often leads to more substantial contributions later in the operating list. Therefore, it is crucial to be familiar surgical instruments and their function to facilitate active assistance of the primary operator. Below we have compiled the 17 most frequently used surgical instruments and five top tips:



**RAMPLEYS SPONGE HOLDER**

Used to hold sponge or gauze for pre-operative sterilisation.



**LANGENBECK RETRACTOR**

Used for retraction of superficial structures such as skin and subcutaneous tissues.



**MORRIS RETRACTOR**

Used for exposure of deeper structures. Step up in size from a Langenbeck retractor.



**DEAVER RETRACTOR**

Hand held deep tissue retractor. Used to retract viscera such as the liver or bowel.



#### WEST RETRACTOR

Self-retaining retractor used to expose superficial tissues or structures.



#### ST. MARKS RETRACTOR

Used for deep retraction within the pelvis, i.e anterior resection.



#### GILLIES (TOOTHED) FORCEPS

Used for handling skin, subcutaneous tissue, muscle and sheath. Must NOT be used when handling blood vessels or bowel.



#### DEBAKEY FORCEPS

Atraumatic, used when handling internal tissues such as bowel. Large surface area means traumatic to skin.



#### ARTERY FORCEPS

Haemostatic, used to control bleeding. Can be used to hold vessels prior to ligation.



#### ALLIS FORCEPS

Traumatic, built to hold tough structures such as aponeuroses, fascia, tendon, sheath and skin.



#### KELLY FORCEPS

Used to clamp blood vessels or tissues. Extremely versatile.



#### BABCOCK FORCEPS

Atraumatic, for holding or grasping delicate tissues such as bowel.



### MOSQUITO FORCEPS

Available curved or straight, haemostatic. Used to secure vessels during ligation.



### LANES FORCEPS

Used to grasp bulky tissue, facilitate skin opposition and hold structures such as lymph nodes.



### MAYO SCISSORS

Semi blunt tip. Straight (as pictured) used for cutting fascia/muscle, curved used for deeper tissue dissection.



### McINDOES SCISSORS

Used for tissue dissection or cutting soft tissues.



### BACKHAUS TOWEL CLIP

Used to secure drapes/ towels. Tip can be either pointed or curved.



Other worthwhile top tips to make the most of the experience include:

1. Arrive early before the operation starts and familiarise yourself with the cases and patients
2. Introduce yourself to the team and operating consultant on arrival
3. Ask if you can scrub for each case
4. Be an enthusiastic and a willing participant
5. Help the scrub nurse when required and ask to be taken through the contents of the instrument tray

You never get a second chance to make a first impression so use the above to make it count!