

### Holding and Stowing Thumb Forceps

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#### Video Transcript

Thumb forceps are generally held in the non-dominant hand, assisting the surgeon's dominant hand during surgery. The basic idea behind using thumb forceps is that one shank is an extension of the thumb and the other is an extension of the opposing fingers. In this video, we will demonstrate the proper methods for holding, using, and stowing thumb forceps during surgery.

The grasp used to hold thumb forceps is called the modified pencil grip. In this grip, the forceps are held between the thumb and index finger, and the shanks rest near the metacarpal-phalangeal joint (the so-called anatomical "snuff box," thumb web, or radial fossa area). This grip gives the surgeon the widest range of maneuverability with the forceps.

Grasping forceps in the palm grip, a grip like one many people use when tweezing hair, has little, if any, use in surgery. In the palm grip, the tips of the forceps can only gain access to tissue through extreme flexion of the wrist, severely limiting the range of useful motion. Additionally, in contrast to the pencil grip, the palm grip does not allow fine pressure alternations at the tips.

When not in use, thumb forceps can be temporarily "stowed" in your non-dominant hand. Stowing forceps frees up the thumb, index, and middle fingers for hand tying suture, or for use with other instruments. To stow the forceps, fold the forceps flat against your palm with the tip facing down. Use your ring and little fingers to hold the instrument in place. The advantage of stowing forceps is that a significant amount of time can be saved during surgery by eliminating the need to repeatedly discard and retrieve the forceps between uses.

You will also need to learn how to change the forceps from the "stow" or "hold" position to the "use" grip. To perform this maneuver, start by turning your palm downward so that gravity moves the forceps away from your palm. Then, the index finger and thumb can grasp the desired section of the shanks without awkward flexion of the metacarpal-phalangeal joints.

Another useful tip to keep in mind when using thumb forceps is to plan properly before grasping tissue. When your anticipated maneuver requires flexion of the wrist, start your forceps with an extended wrist. The same principle holds true when you need to extend your wrist. This will prevent cramping and will give you the full range of motion of your hand.

When working in surgical wounds, it is very important to maintain proper hand positioning. When using thumb forceps in your non-dominant hand, approach the wound on the opposite side from your dominant hand. This will ensure maximal hand mobility. Working on the same side will force your elbows together, limiting the mobility of each hand.

During surgery, it is also important to keep your elbows facing outward. When necessary, turn your body to free an elbow from your side.