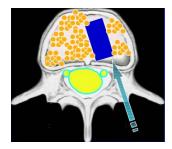
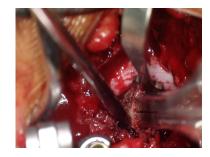
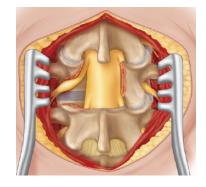


Transforaminal Lumbar Interbody Fusion (TLIF)

The Transforaminal Lumbar Interbody Fusion (TLIF) is a spine procedure that is performed to restore disc height and accomplish fusion throughout the disc space of a given level. As seen in the images the the right, the angle at which the surgeon will gain access to the disc space is through the foramen, hence the name Transforaminal. To gain access to the disc space, the surgeon will generally perform a laminectomy as well as a facetectomy.

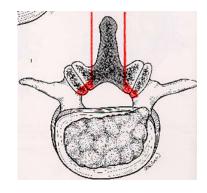


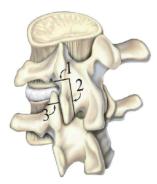




Traditionally, surgeons use powered instruments (i.e. drill w/matchstick bur) or manual instruments (i.e. osteotomes) to perform their laminectomies. However, such devices lack precision (i.e. skipping or skiving), the ability to preserve healthy bone (for grafting purposes) and cause more bleeding intraoperatively. Once the laminectomy has been performed, the surgeon will then utilize these same tools to remove the entirety of one facet. The surgeon will then address excess osteophytes and additional bone pieces using manual instruments (i.e. kerrisons or curettes), which are effectively "blind bites" with increased risk for injury to critical structures (i.e. dura, thecal sack, nerve root).

When performing a TLIF with BoneScalpel, Surgeons will often use a blade to remove the lamina (the area shaded gray in the first image on the right), as well as the targeted facet (the cuts are outlined in the second image on the right). Then the surgeon can use one of the hook shavers to "extend the decompression" and address the lateral recess stenosis (shaded red in the image to the right) on the side in which they are not performing a facetectomy. They can also utilize the shaver to address remaining osteophytes that may be causing any impingement of the spinal cord or nerve roots.





So What?

The utilization of a hook shaver in unison with a BoneScalpel blade, for a TLIF, can be advantageous for multiple reasons. In a TLIF procedure the surgeon is working very closely to both the dura and the exiting nerve root; therefore, safety is extremely important. Due to the atraumatic, longitudinal, non-rotational mechanism of action, users can achieve greater resection in the vicinity of vital structures. Also, when using shavers to replace the Kerrison in hard tissue resection, the "blind bite" is eliminated. In conjunction with the ability to work safely near critical structures, utilizing both blades and shavers for a TLIF allows for the reduction of blood loss and the preservation of healthy bone. Reducing blood loss results in a reduction in expenses for the hospital as they will likely need less blood transfusions and cell saver transfusions. The preservation of healthy bone results in more precise decompressions but it also allows for cost control as the surgeon can utilize more autologous bone and require less money spent on bone grafting supplements.

Selling Tips

- Introduce both blades & shavers during the evaluation phase, can result in greater adoption as there is less concern for cost.
- Ortho Spine surgeons generally prefer the Macrohook Shaver whereas Neuro Spine surgeons generally prefer the Microhook Shaver.

Suggested Tip Combinations

20 mm blunt blade + Micro or Macrohook

Sales App Surgical Videos to Reference

• Dr. Doers TLIF