

Tips for HiRes 90K Magnet Removal—Replacement Procedure

Disclaimer

Advanced Bionics® does not endorse or recommend any procedures other than those stated in the HiRes 90K® Surgeon's Manual for HiFocus® Helix and HiFocus® 1j Electrodes, 9055112-002 and the HiRes 90K® Surgical Video, CI-8167.

We are grateful to

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The surgical tips discussed below are available in a PowerPoint presentation from Boston Scientific.

Things to consider when planning a magnet removal—replacement procedure:

- Use bipolar electrocautery only.
- Have a plastic HiRes 90K Mock-up, CI-4425, to help determine the position of the implanted device and assist in marking the proposed incision line.
- Incision is posterior to the implant coil-antenna. Avoid placing the incision directly over the implanted device.
- When working with the implant magnet or replacement magnet, CI-1412, consider using non-magnetic tools and/or alternative techniques (for example, titanium retractors or sutures to retract the skin flap).
- Have a non-metallic gimmick available to help position the replacement magnet (for example, the plastic “filler” from a suction line).
- Use a headpiece, placed in a sterile glove, to test for proper magnet orientation (“+” side up) and adequate headpiece retention.
- Close the wound and cover with a light-pressure, mastoid dressing.
- Have a back-up HiRes 90K device available in case the implant is damaged during surgery.

Magnet-Removal Procedure

Perform a minimal shave posterior to the device magnet-coil.



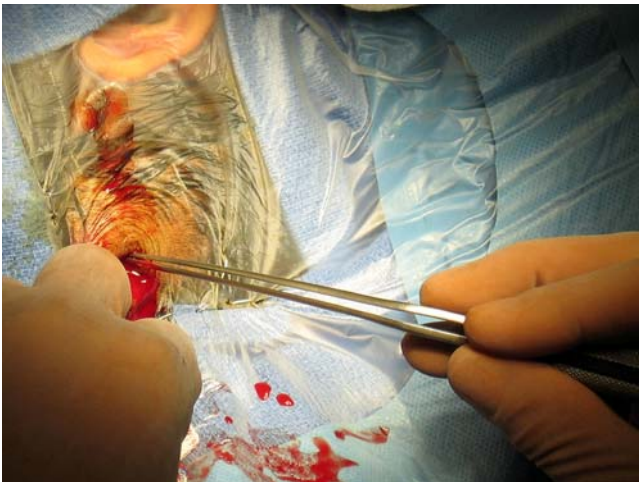
Use a plastic HiRes 90K Mock-up, CI-4425, to help determine the position of the implanted device and assist in marking the proposed incision line.



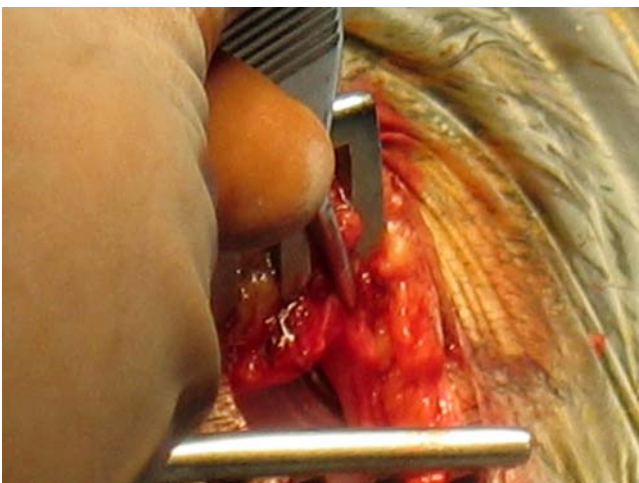
Incision



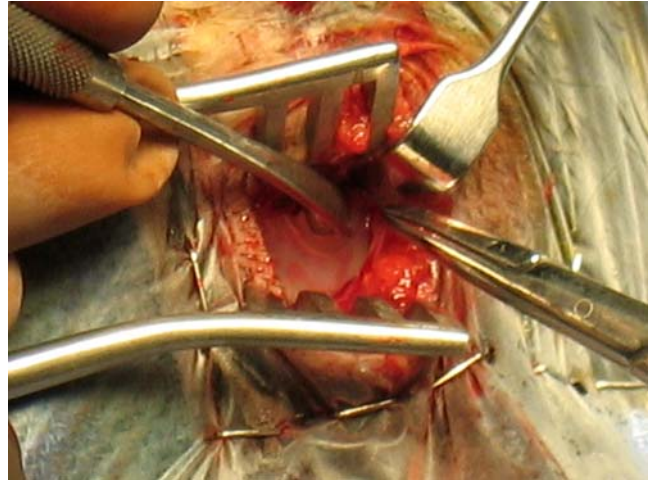
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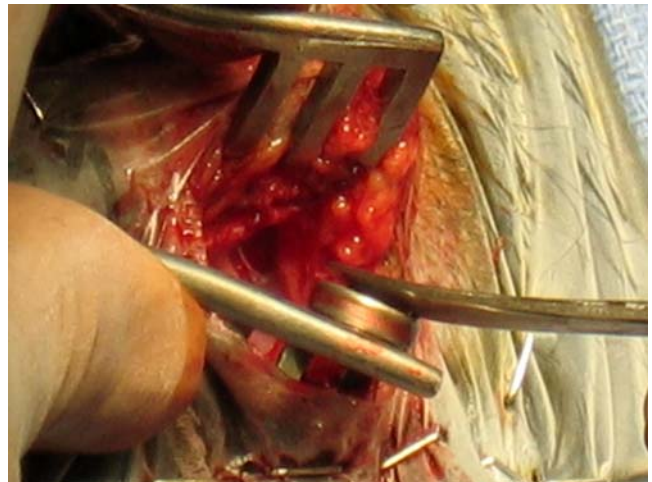
Raise the skin-muscle flap over the internal magnet-coil.



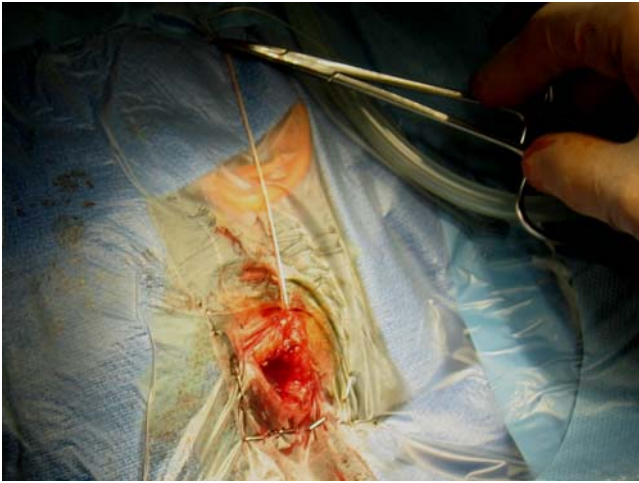
Use a freer elevator to access and lift the original magnet (which should be attracted to the freer elevator) from the implant.



Since most surgical tools are metallic, manipulation of the replacement magnet and its insertion into the implant can be problematic.



Use sutures to retract the skin flap.



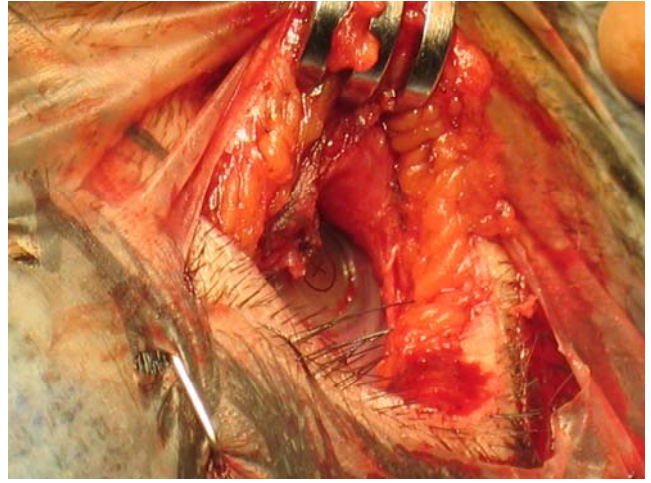
Manually place the replacement magnet, CI-1412, (“+” side up) in the recess of the implant.



A non-metallic gimmick—the plastic “filler” from a suction line—was used to seat the magnet in the recess under the silicone lip.



Replacement Magnet, CI-1412, in place.



Use a headpiece, placed in a sterile glove, to test for proper magnet orientation (“+” side up) and adequate headpiece retention.

Close the wound and cover with a light-pressure, mastoid dressing.