



Needle's Eye Snare™

Transvenous retrieval set

Designed, developed, and manufactured at Cook Vandergrift Inc. in Vandergrift, Pennsylvania, the Needle's Eye Snare has been a long-standing product in Cook's Lead Management specialty within the Vascular division. It is distinctively positioned in the marketplace as the only snare cleared for cardiac lead extraction.

What is lead extraction?

For those who have a pacemaker or an implantable cardioverter defibrillator (ICD), which are devices used

to treat arrhythmia, a cardiac lead is the wire that connects the device to the heart muscle and delivers an electric shock when necessary to correct the heart's rhythm. In some cases, issues, such as infection, develop with these leads that would cause them to need to be removed. This retrieval procedure is known as lead extraction.

The Needle's Eye Snare is used for patients who require the percutaneous retrieval of cardiac leads. In a percutaneous procedure, access to the vascular system is gained

Glossary

- ▶ **Femoral vein** - a large blood vessel located in each thigh.
- ▶ **Jugular vein** - three pairs of major blood vessels that direct blood from the brain back to the heart.

through a needle puncture to the skin. A wire guide is then inserted through a needle and then the needle is removed. A sheath and dilator are then inserted over the wire guide. Then the dilator is removed and the sheath, which contains the snare, is extended, and then deployed. The basket-like form of the snare allows clinicians to extract the lead with a low complication rate.

In one study, when used as a primary approach for lead extraction, the Needle’s Eye Snare resulted in clinical success in 98.2% of patients, with a major complication rate of 0.7% and no procedural mortality.¹

A novel idea

The Needle’s Eye Snare was created by engineer **Robert Booker**, who retired last year after 39 years at Cook. Booker’s novel idea for a snare that would loop around a lead

that did not have a free end—like a pacemaker lead, for example—came to fruition as the Needle’s Eye Snare in 1996, when the device first hit the market. The product’s steady sales over the years have seen a recent uptick with a 20% increase each year for the last five years.

The versatility of the device allows clinicians to treat patients in multiple clinical scenarios. Typically, clinicians gain access through the right femoral vein using one of two product sizes designed for femoral-vein access; however, a jugular-vein access device, which is shorter (54 cm), is also available. The device can be used as a primary approach for removing a lead that is still attached at both ends, as well as to extract broken leads that cannot be extracted through other vessels.

A specialized team at Cook Vandergrift of 15 lead extraction operators manufactures and

supplies Cook’s entire global Needle’s Eye Snare product line. Unique to Vandergrift is its in-house machine shop, where a dedicated team of machinists produces three components of the device—machining the hub, body, and nose piece of the product—which is then delivered to manufacturing less than five feet away.

The Needle’s Eye Snare has been a primary and popular product in Cook’s Lead Management portfolio, remaining unchanged for the last 25 years. However, in light of new technologies and advancements, the product will be updated within the next few years.

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1. Bracke FA, Dekker L, Van Gelder BM. *The Needle’s Eye Snare as a primary tool for pacing lead extraction*. *Europace*. 2013;15(7):1007-1012.

Needle’s Eye Snare products

Two femoral sizes are available, which are differentiated by basket size:

- LR-NES 001 (Lead Removal Needle’s Eye Snare) 13 mm basket
- LR-NES 002 (Lead Removal Needle’s Eye Snare) 20 mm basket

Jugular sizing

- LR-NES 541 (Lead Removal Needle’s Eye Snare) 13 mm basket

For a detailed product animation illustrating how clinicians use the product, visit the Cook Medical website.

www.cookmedical.com/products/vas_lrnes_webds/

