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Surgical Removal of Sea Cucumber Gonads

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1 Works for me [dx.doi.org/10.17504/protocols.io.5pag5ie](https://doi.org/10.17504/protocols.io.5pag5ie)

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ABSTRACT

This is a protocol for sea cucumber gonad removal without killing the sea cucumber or causing evisceration.

MATERIALS

NAME	CATALOG #	VENDOR
Forceps (tweezers), 16cm, Blunt End	FC004.SIZE.1	Bio Basic Inc.
Spatulas Flat/Tapered End	SP073.SIZE.1	Bio Basic Inc.
Ice & ice bucket		
surgical scissors		
7-0 Prolene suture	M860	Esutures
40 ml falcon tube		
Dissection Tray		
Ethanol/Menthol Anesthetic		

- Anesthetize Sea Cucumber as described in the Sea Cucumber Anesthetizing protocol: [dx.doi.org/10.17504/protocols.io.5nyg5fw](https://doi.org/10.17504/protocols.io.5nyg5fw) 30m
- Locate the gonadopore just posterior to the head of the sea cucumber and pinch the skin just behind it 5m
- Using the pointed side of the dissection scissors, push into the body wall of the sea cucumber approximately one centimeter posterior to the gonadopore. When it is no longer difficult to push the scissor blade in, that means you have pierced the body wall. Now angle the scissors towards the back of the sea cucumber and cut a one to two centimeter incision. 1m
- Remove the scissors once the cut has been made. The body cavity pressure should push some fluid and the gonads out of the incision. 1m



If the cut is made too far back on the body, the respiratory tree and intestines are likely to also be expelled through the incision.

- Remove the gonads and put into falcon tubes on ice. Push any internal organs back into the sea cucumber using the spatula. 5m



If too much of the intestines or respiratory tree are expelled through the incision and then pushed back into the body cavity, the sea cucumber will likely eviscerate once the anesthetic wears off

- 6 Using suture, forceps, and hemostat forcep, begin stitching the wound closed using standard medical stitching techniques. Tutorials can be found on youtube: https://www.youtube.com/watch?v=FrCv-odr_QE 15m

- 7 Once the wound is stitched closed, place the sea cucumber back in its container 1m



The wound should completely heal in 2-3 days. Once healed, cut the stitches and remove them. If the stitches are left in too long a lesion will form.



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