



Short communication

Controlled decompression of large ovarian cystic tumors via mini-laparotomy using Dermabond Advanced™

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ABSTRACT

Large cystic ovarian tumors usually require surgical removal because of symptoms and the possibility of malignancy. The ideal surgical approach would minimize the risk of spillage of tumor contents while minimizing surgical morbidity. The present study aims to demonstrate a novel technique to drain large cystic ovarian tumors without spillage. A mini-laparotomy is performed and the tumor surface is exposed. Dermabond Advanced™ (USA Medical and Surgical Supplies 2019a) is applied to the tumor and a surgical glove (USA Medical and Surgical Supplies 2019b) is applied to the glue area. A small incision is made in the center of the portion of the glove that is adherent to the tumor. The cyst fluid is allowed to drain into the glove where it is suctioned away, collapsing the tumor. Once the tumor is sufficiently decompressed, it is exteriorized and resected with the glove still attached. The technique was initially developed in a pig model and subsequently successfully performed by mini-laparotomy on two patients with > 20 cm ovarian masses. This novel technique uses inexpensive and readily available materials for draining large cystic ovarian tumors without spillage so that they can be removed via mini-laparotomy.

See [Video S1](#).

Video S1.

Author contributions

Dr. Hicks-Courant contributed to the conception and design of the method, demonstrations of the technique, and editing and revising the manuscript.

Dr. Awtrey contributed to the conception and design of the method,

and editing and revising the manuscript.

Dr. Kim contributed to the conception and design of the method, demonstrations of the technique, filming and editing the video, and editing and revising the manuscript.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- USA Medical and Surgical Supplies, 2019a. Dermabond Advanced Skin Adhesive DNX12. <https://www.usamedicalsurgical.com/dermabond-advanced-skin-adhesive-dnx12/> (accessed January 7, 2019).
- USA Medical and Surgical Supplies, 2019b. Biogel PI Surgical Gloves. <https://www.usamedicalsurgical.com/biogel-pi-surgical-gloves/> (accessed January 7, 2019).

* This work was deemed to not be human subject research by the Tufts Medical Center Institutional Review Board.

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