

Combined removal of ovarian teratoma and oocyte retrieval by laparoscopic surgery under regional anesthesia

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Objective: To describe the simultaneous laparoscopic approach for teratoma removal and oocyte retrieval performed under regional anesthesia in a woman, desiring to preserve fertility. The patient included in this video gave consent for publication of the video and posting of the video online including social media, the journal website, scientific literature websites, and other applicable sites.

Design: Video case report demonstrating the clinical management and laparoscopic teratoma removal combined with oocyte retrieval accomplished under regional anesthesia.

Patient(s): We present a case of a 31-year-old woman who referred to our Fertility Center with a previous history of right salpingo-oophorectomy for mucinous ovarian cystadenoma and the presence of a large ovarian teratoma of ten centimeters of the contralateral ovary.

Intervention(s): The ovarian stimulation started in the early follicular phase. Not being able to visualize follicular growth during the ovarian stimulation, it was decided to adopt fixed protocol with antagonist on the 5th day and to proceed, on 15th day, with a laparoscopic pick-up and simultaneous removal of the cyst.

Main Outcome Measure(s): Laparoscopic surgery was performed: the left ovary appeared larger in size for the presence of the suspicious mature dermoid cyst and multiple follicles, previously not identified at ultrasound imaging. The follicles contained oocytes that were aspirated with an aspiration needle of 17 G connected to a craft suction pump. Then, practicing the stripping technique, an enucleation of the ovarian cyst was performed. Surprisingly, the removal of the cyst revealed other follicles that were readily aspirated.

Result(s): The patient remained awake during the entire procedure and a low pressure of 10 mmHg was maintained at 15° of Trendelenburg position. A total of seven follicles were aspirated, seven oocytes were retrieved, and six mature oocytes were cryopreserved. The cyst was totally removed and no intracavitary spillage was caused.

Conclusion(s): Simultaneous laparoscopic approach for teratoma removal and oocyte cryopreservation should be considered an effective fertility preservation strategy in patients in whom the presence of an ovarian neof ormation does not allow visualization of growing follicles by ultrasound. Laparoscopic oocyte retrieval under regional anesthesia is a safe and well-tolerated technique and should be considered for patients where the transvaginal approach could not be performed.

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El resumen está disponible en Español al final del artículo.

Key Words: Laparoscopic pick-up, regional anesthesia, oocyte retrieval, ovarian cyst, teratoma removal



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CRedit Authorship Contribution Statement

Carlo Alviggi: Writing – review & editing, Visualization, Validation, Supervision, Project administration, Methodology, Formal analysis, Conceptualization. Giuseppe Gabriele Iorio: Writing – original draft, Validation, Methodology, Formal analysis, Data curation, Conceptualization.

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Paolo Serafino: Writing – original draft, Methodology, Investigation, Formal analysis. **Michela Dell’Aquila:** Writing – review & editing, Writing – original draft, Validation, Software, Methodology, Investigation, Formal analysis. **Giuseppe Bifulco:** Visualization, Validation, Supervision, Project administration, Investigation, Formal analysis, Conceptualization. **Pierluigi Giampaolino:** Writing – review & editing, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization.

Declaration of Interests

C.A. has nothing to disclose. G.G.I. has nothing to disclose. P.S. has nothing to disclose. M.D.A. has nothing to disclose. G.B. has nothing to disclose. P.G. has nothing to disclose.

SUGGESTED READING

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Extirpación combinada de teratoma ovárico y recuperación de ovocitos mediante cirugía laparoscópica bajo anestesia regional

Objetivo: Describir el abordaje laparoscópico simultáneo para la extirpación de teratomas y la recuperación de ovocitos bajo anestesia regional en una mujer que desea preservar su fertilidad. La paciente incluida en este estudio dio su consentimiento para la publicación del video y la difusión del mismo en línea, incluidas las redes sociales, el sitio web de la revista, los sitios web de literatura científica y otros sitios aplicables.

Diseño: Informe de un caso en video que demuestra el manejo clínico y la extirpación laparoscópica de teratomas combinada con la recuperación de ovocitos bajo anestesia regional.

Entorno: Hospital universitario de atención terciaria.

Paciente: Presentamos el caso de una mujer de 31 años que acudió a nuestro Centro de Fertilidad con un antecedente previo de salpingooforectomía derecha por cistoadenoma ovárico mucinoso y la presencia de un gran teratoma ovárico de diez centímetros en el ovario contralateral.

Intervención: La estimulación ovárica comenzó en la fase folicular temprana. Al no poder visualizar el crecimiento folicular durante la folicular durante la estimulación ovárica, se decidió adoptar un protocolo fijo con antagonista el 5° día y proceder, el 15° día, a una laparoscópica y extirpación simultánea del quiste.

Medida(s) principal(es) de resultado: Se realizó cirugía laparoscópica: el ovario izquierdo parecía de mayor tamaño por la presencia de probable quiste dermoide maduro y múltiples folículos, no identificados previamente en la ecografía. Los folículos contenían ovocitos que fueron aspirados con una aguja de aspiración de 17 G conectada a una bomba de aspiración. A continuación, practicando la técnica de disecado por capas, se realizó una enucleación del quiste ovárico. Sorprendentemente, la extirpación del quiste reveló otros folículos que se aspiraron fácilmente.

Resultado(s): La paciente permaneció despierta durante todo el procedimiento y se mantuvo una presión baja de 10 mmHg a los 15 de la posición de Trendelenburg. Se aspiraron siete folículos, se extrajeron siete ovocitos y se criopreservaron seis ovocitos maduros. El quiste se extirpó totalmente y no se produjo ningún derrame intracavitario.

Conclusiones: El abordaje laparoscópico simultáneo para la extirpación del teratoma y la criopreservación de ovocitos debe considerarse una estrategia eficaz de la fertilidad en pacientes en las que la presencia de una neoformación ovárica no permite la visualización de folículos en crecimiento mediante ecografía. La recuperación laparoscópica de ovocitos bajo anestesia regional es una técnica segura y bien tolerada y debe considerarse para pacientes en las que no se puede realizar el abordaje transvaginal.