

## Transvaginal Natural Orifice Transluminal Endoscopic Surgery (vNOTES) salpingotomy for ectopic pregnancy: Video Article

Author: <sup>1 2</sup> Suyash Naval

Affiliation: <sup>1</sup> Lifescope NOTES Centre, Naval Multi Specialty Hospital, M. J. College Road, Near Bhaskar Market, Jalgaon- 425001, Maharashtra, India

<sup>2</sup> Jawaharlal Nehru Medical College, Sawangi (Meghe), Wardha- 442107, Maharashtra, India

### Introduction:

The objective of this video is to demonstrate transvaginal natural orifice transluminal endoscopic surgery (vNOTES) salpingotomy for ectopic pregnancy.

**Key words:** vNOTES; ectopic pregnancy; vaginal surgery; NOTES; salpingotomy

### Materials and methods:

A 25-year-old female patient was given a lithotomy position and general anesthesia. A posterior culdotomy of about 3.5 cm was made. After draining the blood collected in the cul de sac, a small size wound protector/retractor (Applied Medical, Rancho Santa Margarita, CA, USA) was inserted through the incision. A glove port, made using a size 7 latex glove and reusable trocars (one 10 mm and three 5 mm trocars), was then applied to the outer ring of the wound protector. CO<sub>2</sub> insufflation was started through one 5 mm trocar and pneumoperitoneum was achieved. Under vNOTES vision, pelvis and abdomen were inspected and the site of left tubal ectopic was identified. Five ml of diluted vasopressin solution (10 units in 100 ml) was instilled in the mesosalpinx and a linear incision was made on the tube with a monopolar hook. With the aid of hydro dissection, the ectopic was delivered and retrieved in the glove port. The incision on the tube was approximated by taking a serosal stitch with 6-0 polypropylene. After removing the vNOTES glove port, the vagina was closed with a 2-0 polyglactin suture. The main outcome was complete removal of ectopic pregnancy without conversion to laparoscopy or laparotomy. A step-by-step procedure video with an explanation was produced.

## **Results and discussion:**

The duration of the surgery was 47 minutes. The ectopic pregnancy was successfully removed without any intraoperative and postoperative complications. The patient was discharged on the same day of surgery after 9 hours.

Since the patient had a strong desire to conserve the fallopian tube, a salpingotomy with tubal repair was done. vNOTES allowed sufficient triangulation to suture the gaping incision on the fallopian tube. To the best of our knowledge, this is the first video report of vNOTES salpingotomy with the tubal repair.

## **Conclusion:**

Transvaginal NOTES is a less invasive and more cosmetic alternative to laparoscopy. Salpingotomy with the intracorporeal suturing repair is possible due to sufficient triangulation obtained during vNOTES. This is a feasible method that should be further validated.

## **References:**

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## **Comment of the Editor:**

In many countries, the use of medical gloves as a port is prohibited. It can be considered as an option, but every surgeon should be responsible with off-label use of non-surgical aids.