



បន្ទីរមណ្ឌលជាតិគាំពារមាតា និងទារក
National Maternal and Child Health Center

ទិវាសល្យសាស្ត្រ សម្ភព និងរោគស្រ្តី លើកទី៣

ប្រធានបទ៖ «ពង្រឹង និងបង្កើនសេវាកម្មសាធារណៈ ថែទាំ សង្គ្រោះ ប្រកបដោយគុណភាព»

**Laparoscopic Surgery for Ectopic Pregnancy at Mother
and Child Health National Center**



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ថ្ងៃទី៤-៥ ខែកញ្ញា ឆ្នាំ២០២៥
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Introduction

- An ectopic pregnancy is when a fertilized egg implants itself outside of the uterus, usually in the fallopian tube.
- Site of an ectopic pregnancy: Cornua, Fallopian tube, Ovary, Cervix, Cesarean scar, or abdominal cavity.
- An ectopic pregnancy is a threat to a woman's life, and it compromises later pregnancy.
- The current incidence of ectopic pregnancy is 1%-2% of reported pregnancies.

Introduction

- Laparoscopy has been used in the diagnosis of ectopic pregnancy for many years. Bruhat MA, and his team performed laparoscopic excision of the tube in 1973 and conservative management of ectopic pregnancy in 1980.
- It is safe and feasible in instances where there is a tubal rupture and hemoperitoneum, provided that the patient is haemodynamically stable.

Introduction

- In the past, laparotomy salpingectomy was a norm.
- With an advancement in laparoscopy, laparoscopic salpingectomy and laparoscopic salpingotomy are being performed for an ectopic pregnancy.
- Recent development in treatment of ectopic pregnancy has sifted from saving the mother's life to saving the woman's fertility.

OBJECTIVES

❖ General objective:

- To identify safety and efficacy of laparoscopic management of ectopic pregnancies in our hospital.

❖ Specific objectives:

- To describe laparoscopic surgical procedure for ectopic pregnancy.
- To evaluate post-operative recovery and patient outcome.

Material and Methods

- A retrospective descriptive study of 20 patients diagnosed with ectopic pregnancy admitted at NMCHC from 1st January, 2024 to 31st December, 2024 was conducted.
- Descriptive statistic was used to analyse the data.
- The studied patients were shorted from patients' archive of the hospital surgical program and electronic archive of the hospital.

Materials and Methods

- Inclusion criteria:
 - patients with full investigations
 - patients with hemodynamic stable
 - patients with complete surgical reports
- Exclusion criteria:
 - patients with hemodynamic unstable
 - patients without surgical reports
 - patients under laparotomy

Results

Table 1: Parity

Parity	Mean	Median	Mode
	1.9	2	2

Results

Table 2: Age

Age	Mean	Median	Mode
	30.9 yrs	28	28

Results

Table 3: Location of ectopic Pregnancy

Location of EP	Left Ampulla	Right Ampulla	Cornua	Total
No.	7	11	2	20
Percentage	35%	55%	10%	100%

Results

Table 4: Ectopic pregnancy characteristics

Previous surgery	1- scar uterus	2-scar uterus	Ectopic pregnancy
No. of cases	1 case	2 cases	1 case
Percentage	5%	10%	5%
Type of EP	Non-ruptured	Ruptured	Total
No. of cases	7 cases	13 cases	20 cases
Percentage	35%	65%	100%

Results

Table 5 : Type of operation

Type of Operation	Programmed	Urgent	Total
No. of Cases	19 cases	1 case	20 cases
Percentage	95%	5%	100%

Results

Table 6: Operation time, Blood loss and post operation hospital stay

	Mean	Median	Mode
Operation time (in minutes)	72.5 mn	65 mn	70 mn
Blood loss	105.5 ml	75 ml	100 ml
Hospital stay post-ope	4 days	3.5 days	3 days

Results

Instruments and Procedures

Instrumentations

- One laparoscopic set with surgical generator
- One 5mm, 30-degree telescope
- Three 5 mm, 30-degree trocars
- One 10mm trocar
- One Veress needle
- Two graspers
- One scissors, straight or curve
- One bi-polar Maryland

Results

Laparoscopic procedure

- Under general anesthesia and in Trendelenburg position, laparoscopic procedures were performed through a 5mm-telescopic port at the upper umbilical crease and two 5 mm- left lateral ports.
- Salpingectomy is performed step-wise using bipolar forceps to desiccate the mesosalpinx and scissors to cut along the mesosalpinx and across the proximal tube.
- The 5mm lateral port wound was enlarged and replaced with 10mm port for removal of surgical specimens.
- The pelvis was irrigated with saline and aspirated.
- A drain in the Douglas pouch was put in place and removed 24 hours the next day.

Results

Laparoscopic procedure

- The side ports were removed under vision and the 10-mm, side-port wound was closed
- The skin wound for 5-mm port wound were closed using Nylon No.2.0

Discussion

Surgical Procedure

Ep. Indications	NMCHC 2024	India 2011
Salpingectomy	20	7
Salpingotomy	Nil	16
Lavage and suction of Pelvic hematocele	Nil	5
Desiccation of corpus Luteum for Ovarian EP	Nil	2
Total	20	30

Discussion

Surgical procedures

Number of ports	NMCHC 2024	India Duggal BS, et al. 2011
	3 ports of 5mm	1 port of 10mm and 2 ports of 5mm
Telescope used	1 telescope of 5mm 30 degree	1 telescope of 10mm 30 degree and 1 telescope of 5mm 30 degree
Enlarging port size	Yes	No
Extraction of surgical pieces	Through 10mm port at the side port	Through 10mm port at the umbilical port

Discussion

Operation Time

Mean of Operation Time	MCH 2024	India Duggal BS, et al. 2011	Taiwan Ding Dah-Ching, et al. 2008
	72.5 mn	70 mn	73.2 mn

Discussion

Length of Hospital Stay

Hospital stay	NMCHC 2024	India Duggal BS, et al. 2011	Taiwan Ding Dah-Ching, et al. 2008
Mean	4 days	2 days	2.7 days

Conclusion

- Laparoscopy is used in diagnosis and treatment of ectopic pregnancy in a single procedure.
- It is safe and feasible in instances where there is a tubal rupture and hemoperitoneum, provided that the patient is not haemodynamically compromised
- Laparoscopic surgery is convenience to the patients as the wounds are cosmetically small. It reduces the length of hospital stay, the use of antibiotics and analgesics.

Recommendations

- Salpingotomy procedure should be attempted for nulliparous patients and patients with single tube, who wish to conceive, provided that the patients' tube is compromised and the appropriate instrument is available.

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