

A Clinical Audit: On the Management of Ectopic Pregnancy

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Abstract

We performed a clinical audit on ectopic pregnancy to evaluate the risk factors involved in the patient's clinical presentation, radiological results, and laboratory results to assess the management of ectopic pregnancy. We planned to improve the areas that were lacking in ectopic pregnancy management. We conclude by, Option of salpingotomy as a surgical alternative and maintaining ectopic register for future follow up.

Keywords: Ectopic pregnancy, Laboratory findings, Management, surgery

Definition

An ectopic pregnancy is any pregnancy implanted outside the endometrial cavity.

Rate of ectopic pregnancy is 11/1000, with maternal mortality of 0.2/1000.

Fatality rate has decreased over recent years, showing that early diagnosis and appropriate management make a difference.

Risk Factors of Ectopic Pregnancy

- Previous ectopic pregnancy
- Prior tubal surgeries
- Abdominal and pelvic surgeries
- Pelvic inflammatory disease
- Endometriosis
- Assisted reproductive techniques such as IVF
- Advanced age
- Intrauterine device users
- Emergency contraception
- Cigarette smoking

Types of Ectopic Gestation

- 97.7% occur in the Fallopian tube
 - Ampullary- 80%
 - Isthmic- 12%
 - Fimbrial- 5%
 - 2-3%- interstitial

- Caesarean section scar on the uterus
- Less than <1% are cervical (1 in 2000)
- Cornual (1 in 76000)
- 0.5-3% Ovarian
- <1% are abdominal
- <1% are heterotopic pregnancies.

Management of Ectopic Pregnancies

Expectant management
Medical management
Surgical management.

Based on NICE Guidelines

Treatment	Sr. Beta HCG	Adnexal Mass	Fetal Heart Beat	Hemoperitoneum Symptomatic
Expectant	<1500	<35 MM	Absent	No
Medical	<5000	<35 MM	Absent	No
Surgical	>5000	>35 MM	Present	Yes

Mode of Surgery

Laparoscopic excision of ectopic sac:
Hemodynamically stable patient.

Laparotomy: Hemodynamically unstable patient.

Salpingectomy:

Indicated if contralateral tube is healthy and no fertility reducing factors.

Follow up the patient with UPT after 3 weeks.

Salpingotomy:

Salpingotomy is indicated with history of fertility-reducing factors (previous ectopic pregnancy, contralateral tubal damage, previous abdominal surgery, and previous pelvic inflammatory disease).

Post salpingotomy follow up the patient with weekly HCG till negative.

Aim

To analyze the demographic profile, risk factors, clinical presentation, radiological findings, outcomes and management of ectopic pregnancy in a tertiary care hospital.

Objective

To evaluate the risk factors involved, the patient's clinical presentation, radiological results, laboratory results and to assess the management of ectopic pregnancy in accordance with NICE guidelines in order to consider the areas that were lacking in ectopic pregnancy management.

Materials and Methods

A Retrospective data collection was done of all women with ectopic pregnancy within the time frame of January 2021–august 2023 to assess the age, parity, previous surgical history/other risk factors and the lab findings like radiological findings, laboratory findings, medical management, and surgical management.

Inclusion Criteria: Presenting symptoms like,

- Abdominal pain
- Amenorrhoea
- Per vaginal bleed
- Shock

It was then compared with NICE guidelines regarding the management protocol.

Demographic Profile

In our study group,

Total no of deliveries - 903
Total no of ectopic - 47

Parameters	Most Common	Percentage (%)
Age	25-30	40
Gravida	Multigravida	57

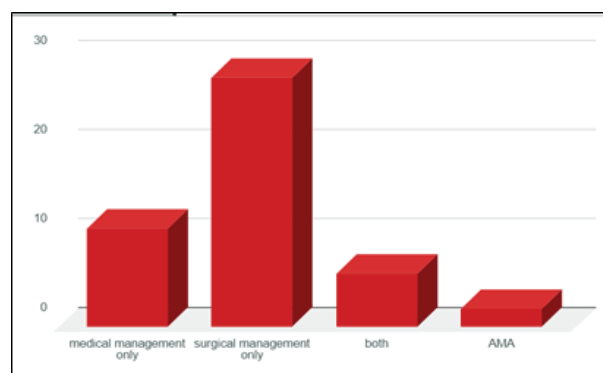
Risk factors

Past Surgical H/O	Total	Percentage (%)
No risk	22	47
Previous LSCS without ST	23	49
Previous Ectopic History	2	4
Over all	47	100

Type of Ectopic Gestation

Type	Total	Percentage (%)
Tubal	39	83
Cornual	4	9
Hetrotopic	2	4
Scar ectopic	2	4
Over all	47	100

Management



Medical Management

Out of 47 ectopic, 17 were medically managed. Out of 17, 11 were successfully managed in our institution. The 6 were surgically managed.

Surgical Management

Out of 47 ectopic, 34 were managed surgically.

Surgical Management	Laparotomy	Laparoscopy
34	18	16

Laboratory Findings

Management	Sr. Beta hcg <5000	Sr. Beta hcg >5000
Total	26	21

Radiological Findings

Gestational Sac

<35MM	26	55%
>35MM	21	44%

FH

Present	3	6%
Absent	44	94%

Hemoperitoneum

Yes	23	49%
No	24	51%

Results

All 47 ectopics had sr. beta hcg and TV ultrasound at the time of presentation (100%).

In 16 out of 17 women, who received methotrexate were within hospital guidelines for medical management (99%).

In 11 out of 17 were successfully managed (65%).

All women who were surgically intervened for tubal ectopics underwent salpingectomy (100%).

In 28 out of 28 had clear indication documented for surgery within local protocol (100%).

Areas to Improve

Emphasize on documentation of risk factors pertaining to the disease.

The reason for salpingectomy rather than salpingotomy should be documented in OT notes for future reference.

Option of salpingotomy as a surgical alternative can be considered.

Maintaining ectopic register for future follow up.

Reference

[1] Ectopic pregnancy and miscarriage: diagnosis and initial management. NICE guideline [NG126]. 2019.