A CLINICAL STUDY OF PRESENTATION AND MANAGEMENT OF ECTOPIC PREGNANCY AND ITS OUTCOME

Dissertation Submitted to

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In partial fulfilment for the requirement for the award of the degree of

M.S OBSTERICS & GYNAECOLOGY

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THE TAMILNADU DR. M.G.R MEDICAL UNIVERSITY
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MAY 2022

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I **Dr. RASHETHA M**, *solemnly declare that this dissertation titled* **"A CLINICAL STUDY OF PRESENTATION AND MANAGEMENT OF ECTOPIC PREGNANCY AND ITS OUTCOME"** *is a bonafide work done by me at Govt. Mohan Kumaramangalam Medical College, Salem from January 2020 onwards under the guidance and supervision of* **Prof. S.S.SUBHA MD., DGO**, *Professor and Head of the Department, Department of Obstetrics and Gynaecology, Govt Mohan Kumaramangalam Medical College, Salem.*

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Prof. Dr. S.S.SUBHA M.D., DGO,
Professor and Head of the Department,
Department of Obsterics and Gynaecology,
Govt. Mohan Kumaramangalam Medical College Hospital – Salem

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Seal & Signature of the HOD

Dr. S.S.SUBHA, MD.,DGO.,
Professor and Head
Department of Obstetrics and Gynecology
Government Mohan Kumaramangalam Medical College Hospital, Salem, Tamil Nadu, India

Date :

Place : *Salem*

GOVERNMENT MOHAN KUMARAMANGALAM MEDICAL COLLEGE HOSPITAL - SALEM

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Date :

Place : *Salem*

Prof. Dr. VALLI SATHYAMOORTHY M.D, D.A

DEAN

Govt Mohan Kumaramangalam Medical College Hospital,

Salem, Tamil Nadu.

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Prof. Dr. S.S.SUBHA M.D., DGO,
Professor and Head of the Department,
Department of Obsterics and Gynaecology,
Govt. Mohan Kumaramangalam Medical College Hospital – Salem

GOVERNMENT MOHANKUMARAMANGALAM
MEDICAL COLLEGE & HOSPITAL
SALEM, TAMILNADU
College: Phone No.0427-2383313 Fax No:0427-2383193
E-Mail ID: deangmkmcslm@gmail.com
Hospital: Phone No: 0427 - 2210674, 2210757 Fax : 0427 - 2210876
E-Mail ID: msgmkmchsalem@gmail.com

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Guide/Principal Investigator	Dr.S.S.SUBHA,MD,DGO THE PROFESSOR & HOD OF O&G GMKMCH, SALEM-01.
Co- Guide	Dr.L.SHANMUGAVADIVU, MD, (O&G) Associate Professor Depart. of O&G GMKMCH, SALEM-1.
Primary Investigator	Dr.M.RASHETHA,M.S,(O&G) 1st Year PG MS O&G GMKMC&H, SALEM-01.
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VICE PRINCIPAL
Govt. Mohan Kumaramangalam
Medical College,
SALEM - 636 030.

22/11/19

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ABBREVIATIONS

ART	-	Artificial Reproductive Techniques
PID	-	Pelvic Inflammatory Disease
β hCG	-	Beta human Chorionic Gonadotropin
USG	-	Ultrasound
YRS	-	Years
Hrs	-	Hours
IUCD	-	Intra Uterine Contraceptive Device
TSH	-	Thyroid Stimulating Hormone
mIU	-	million International Unit
UPT	-	Urine Pregnancy Test
TVS	-	Transvaginal Sonography
TAS	-	Transabdominal Sonography
PUL	-	Pregnancy of Unknown Location
CT	-	Computed Tomography
MRI	-	Magnetic Resonance Imaging
POD	-	Pouch of Douglas
HSG	-	Hysterosalphingography
MTX	-	Methotrexate
Gynaec	-	Gynaecology
LMP	-	Last Menstrual Period
NK	-	Not Known
NA	-	Not Applicable

ND	-	Not Done
ST	-	Sterilisation
TAT	-	Total Abdominal Tubectomy
PS	-	Puerperal Sterilisation
LS	-	Laparoscopic Sterilisation
OCP	-	Oral Contraceptive Pills
POP	-	Progesterone Only Pills
LAM	-	Lactational Amenorrhoea
Em. Pills	-	Emergency contraceptive pills
LSCS	-	Lower Segment Caesarean Section
H/O	-	History of
Prev	-	Previous
MTP	-	Medical Termination of Pregnancy
Hb	-	Haemoglobin
e/o	-	evidence of
B/L	-	Bilateral
Rt	-	Right
Lt	-	Left
RSO	-	Right Salphingo Oophorectomy
LSO	-	Left Salphingo Oophorectomy
D & C	-	Dilatation and Curettage
Chr. R	-	Chronic Rupture
R	-	Ruptured

UR	-	Unruptured
WB	-	Whole Blood
PCV	-	Packed Cell Volume
FFP	-	Fresh Frozen Plasma
PLTS	-	Platelets
ICU	-	Intensive Care Unit
HPE	-	Histopathological Examination
Ameno	-	Amenorrhoea
Pain	-	Abdominal pain
Bleed p/v	-	Bleeding per vaginum
Class.triad	-	Classical Triad
Abd	-	Abdomen
f.fullness	-	forniceal fullness
f.tenderness	-	forniceal tenderness
adnex. mass	-	adnexal mass
empty ut	-	empty uterus
O & G	-	Obstetrics and Gynaecology
P/V	-	Per Vaginum

CONTENTS

LIST OF TABLES

LIST OF TABLES

ABSTRACT

BACKGROUND

Ectopic pregnancy is a medical emergency, where it is imperative to diagnose the patient in early state before it goes for rupture. This timely intervention will prevent morbidity and mortality.

AIMS AND OBJECTIVES

- To know the age group, parity and risk factors of ectopic pregnancy.
- To observe and analyse the various clinical presentations in ectopic pregnancy and its management and determine their outcomes.
- To explore the surgical management of ectopic pregnancy by different ways in a tertiary care hospital and analyse their outcomes.

MATERIALS AND METHODS

Cross sectional study of 2 years duration carried out in Government Mohan Kumaramangalam Medical College

RESULTS

85.7 % belonged to 21 – 30 years of age. Only 21% were primigravida. 12.9 % had irregular cycles. 1 patient had negative urine pregnancy test and 3 patients had weekly positive urine pregnancy test. 41.2 % patients presented with > 5 – 8 weeks gestation. 37.6 % patients presented with 8 – 11 weeks gestation. Only 18 % patients were not anaemic. 28 % of study population had tachycardia. 14.1 % patients presented in hypotension. 5% of population had hemoperitoneum > 1000ml. pallor

was present in 72.9 % patients. 22.4% were sterilised. Risk factors, presenting symptoms were analysed. Types of ectopic, site of ectopic and side of ectopic and management was studied.

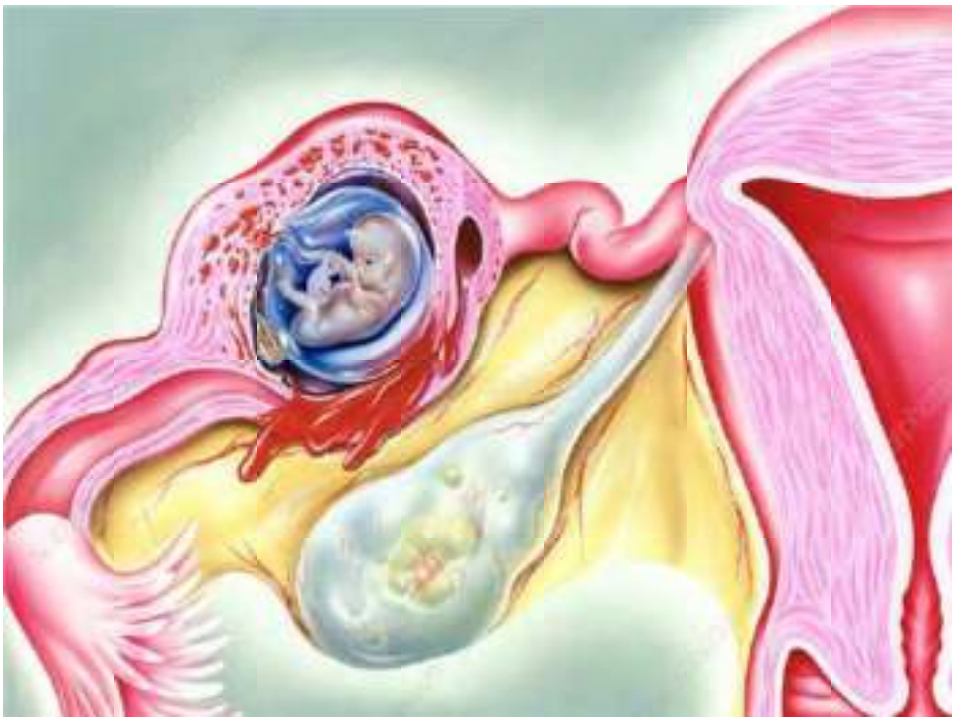
CONCLUSION

With an increase in incidence of ectopic pregnancy, the decrease in maternal mortality is with the help of early diagnostic tools. Most of the patients were managed surgically as most of them were late referral. Clinicians should highly suspicious in all reproductive women irrespective of the presence or absence of amenorrhea and sterilisation status.

KEY WORDS : ectopic pregnancy, salphingectomy, hemoperitoneum

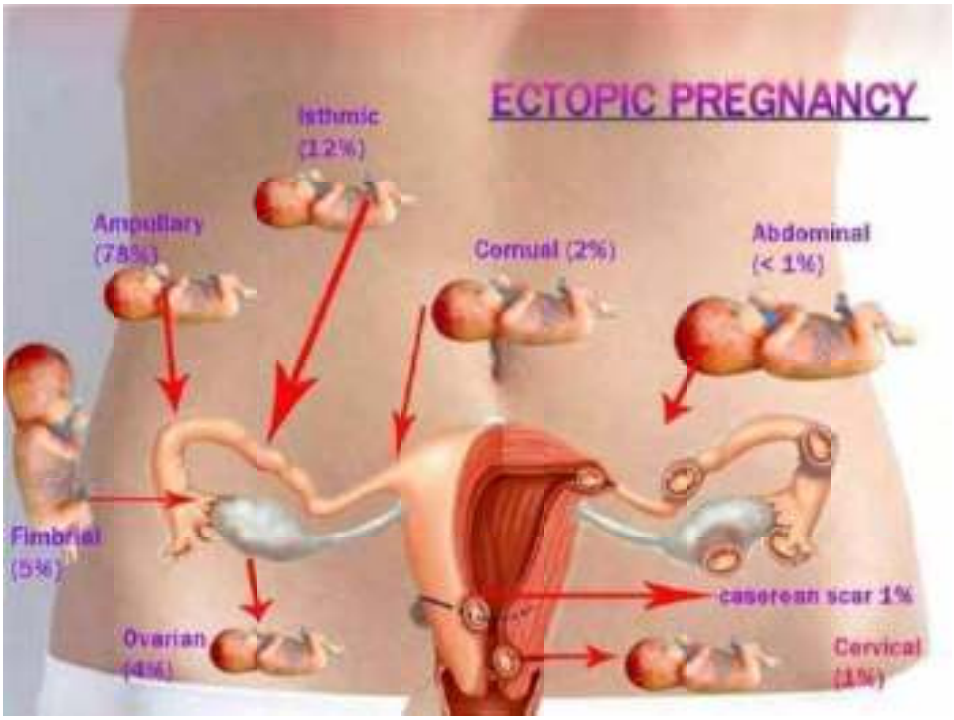
INTRODUCTION

Ectopic pregnancy is originated from 'ektopos '- Greek word. In ectopic pregnancy gestational sac is implanted outside the endometrial lining. the incidence of ectopic pregnancy is around 1 - 2 percentage in most Hospital based studies and it has been on the Rise during the last few decades.[1]



The triad of amenorrhea abdominal pain and vaginal bleeding is not present in majority of the cases and some of them may have non-specific symptoms, are unaware of the present pregnancy and finally present with hemodynamic shock. The contribution of ectopic pregnancy to maternal mortality rate and other developing countries from exactly known studies indicates 3.5 to 7.1 of maternal death.[2] Main causes of these deaths are due to late diagnosis and late admissions with severe hypovolemic shock. Ruptured ectopic pregnancy with severe intra-abdominal bleeding occurs in terminal referral situations. The developing blastocyst implants

outside the uterus; fallopian tube - ampulla 79.6%, isthumic 12.3 %, fimbrial 6.2 %, ovary 0.15 % and abdominal cavity 1.4 % .[3]



In current century the developing countries are facing with four fold increase in the occurrence of ectopic pregnancy from 0.3 % to 1.2 % , this rise is mainly attributed to advanced techniques for diagnosing the ectopic pregnancy in earlier stage and an increased prevalence of ART and PID.[4,5] Early diagnosis of ectopic pregnancy does help to reduce the incidence of rupture and hence provide conservative Medical and Surgical Management. as it poses an important threat among the reproductive age group women. Our study aims to analyse the risk factors, presentation and management with its outcomes. Risk factors include previous ectopic pregnancy, tubal sterilization, presence of intrauterine devices ,smoking, multiple sexual partners, PID, tubal corrective surgeries any other tubal Pathology.[6] The availability of Beta HCG and high resolution ultrasound paved way for earlier diagnosis has reduced mortality rate.[7]

AIM OF THE STUDY

A detailed study of ectopic pregnancy in a particular period of time in order to identify the incidence, risk factors, clinical features, presentation, diagnosis and management and morbidity and mortality associated with ectopic pregnancy in a tertiary care Hospital. To analyse the various aspects of presentation so as to pave way for early diagnosis and adequate management. To identify the wide spectrum of complications like from asymptomatic cases to acute abdomen and haemorrhagic shock.

OBJECTIVES OF THE STUDY

1. To know the incidence of ectopic pregnancy
2. To know the age group, parity, sterilization status with respect to ectopic pregnancy
3. To analyse the various risk factors
4. To describe the clinical presentation
5. To identify the changes in vital signs along with various clinical management
6. To determine the factors associated with successful medical management
7. To evaluate the success rate of surgical procedures over conservative management
8. To plan medical management for all unruptured ectopic pregnancy

REVIEW OF LITERATURE

Ectopic pregnancy was first recognised in 11th century and considered fatal till 18 century. In 20th century with improvements of anaesthesia and blood transfusion there was decreased maternal mortality rate due to ectopic pregnancy. It is the leading pregnancy-related cause of death during the first trimester in our country with about 9%. Anything that impedes the transfer of the fertilized egg into the endometrial cavity on the uterus leads to ectopic gestation. Pregnancy, which implants outside the uterus develops initially but when there is no more room for it to grow, it results in rupture. The embryo which is implanting outside the uterus acquire blood supply from the site of implantation and when it is no longer to accommodate it results in rupture and massive internal haemorrhage which threatens mother's life unless otherwise diagnosed and treated.

ETIOLOGY

PELVIC INFLAMMATORY DISEASE (PID)

Common cause of PID - the infective agent chlamydia trachomatis, infectivity ranges broadly from cervicitis to tubo - ovarian salpingitis. More than 50% of those infected are not aware of their exposure. Other organisms include Neisseria Gonorrhea resulting in salpingitis. Salpingitis imposes 4 times risk of ectopic. [sepillion and wood]

PREVIOUS ECTOPIC PREGNANCY

A single history of ectopic pregnancy increases the likelihood of 7 to 13 times incidence in the next pregnancy [sepillion and wood]

HISTORY OF SURGERY

Previous tubal surgery increases the risk of ectopic; it depends on the degree of damage and bodily changes like salpingostomy, neo-salpingostomy, fimbrioplasty, tubal reanastomosis, Peri tubal and periovarian adhesions. The risk of ectopic pregnancy after tubal ligation is about 35 to 50 percentage more commonly after 2 years or more, rather than immediately.

FERTILITY DRUGS AND ARTIFICIAL REPRODUCTIVE TECHNIQUES

The use of clomiphene citrate and injectable gonadotropins has been attributed to increased incidence, ovulation induction with the presence of high hormone levels and ART techniques like in vitro fertilization and gamete intra fallopian transfer (GIFT) seems to be associated ectopic pregnancy. In a study of the 300 pregnancy through IVF- ectopic pregnancy rate was 4.5 % which proves this evidence.

PROGESTERONE IUCD

The use of this device has been suspected as a risk factor, the probability of ectopic pregnancy when the woman gets pregnant with an IUCD in-situ is 3 to 4 percentage.

INCREASING AGE

Ectopic pregnancy occurs mostly in older age group with three to four times risk. Myo-electrical activity in fallopian which is responsible for the tubal motility may slow down with increasing age and leads to abnormal gestation.

OBESITY

Obesity was associated with reduced fecundity and those women are more to polycystic ovarian syndrome and anovulation. Obese women tend to seek for sub fertility more and the risk of ectopic pregnancy is increased with increased duration of subfertility.

SMOKING

An elevated risk of 1 - 3.5 X among smokers was identified, attributed to delayed ovulation, altered tubal and uterine motility and altered immunity.

SALPINGITIS ISTHMICA NODOSUM

These are microscopic substances of tubal epithelium present in the myosalphinx or below the tubal serosa. 50 % of patients who underwent salpingectomy for ectopic pregnancy had these substances and are attributed to post inflammatory and congenital and acquired tubal alteration.

Other risk factors include previous exposure to diethylstilbestrol, a T shaped uterus, previous abdominal surgery etc.

SITES OF ECTOPIC PREGNANCY

- Tubal pregnancy
- Cervical pregnancy
- Ovarian pregnancy
- Caesarean scar pregnancy
- Cornual pregnancy
- Abdominal pregnancy

As the most common factor for the occurrence of ectopic pregnancy is tubal pathology, most of the implantation occurs in the fallopian tube.

The various sites in the tube are,[8]

Ampullary - 70%

Fimbrial - 11%

Isthmic - 12%

Interstitial - 2.4%

CLINICAL PRESENTATION

The classical triad of ectopic pregnancy are

1) Abdominal pain
2) Bleeding PV
3) Amenorrhoea

But this classical triad manifests in only 50 % of patients.[9] The classical presenting symptoms in this is sharp colicky type of abdominal pain which is present in almost 100 % of cases.[10] If the rupture occurs in early weeks there will be no history of amenorrhea. In case of cornual and interstitial pregnancies amenorrhea lasts even upto 16 weeks.[11] Abnormal vaginal bleeding occurs in about 50 % of patients [5] Early vaginal bleeding simulating uterine abortion in seen in caesarean scar pregnancy[10] other symptoms include nausea , vomiting, diarrhoea, fever, distension.

Pain in the tip of shoulder occurs with irritation of diaphragm in cases of massive hemoperitoneum as seen with late presentations.

DIFFERENTIAL DIAGNOSIS

The following are the differential diagnosis with respect to the clinical presentation.[12]

1) Pelvic inflammatory disease
2) Dysmenorrhoea
3) Endometriosis
4) Ruptured corpus luteal cyst
5) Acute appendicitis
6) Typhoid perforation
7) Acute intestinal obstruction
8) Acute diverticulitis
9) Gastroenteritis.

PHYSICAL EXAMINATION

The clinical examination varies with each presentation of the ectopic pregnancy.

Patients presenting with hypotension, tachycardia, pallor, haemorrhagic shock indicates signs of rupture ectopic pregnancy.[13]

In cases of un-ruptured ectopic pregnancy patients have stable hemodynamic status.

Abdominal examination reveals presence of abdominal tenderness, distension , guarding, rigidity.

Per vaginal examination findings present as forniceal tendernesss, forniceal fullness, positive cervical excitation, cervical motion tenderness[14]

CULDOCENTESIS

It is an invasive procedure in which peritoneal fluid is aspirated from the cul de sac. However with the advent of ultrasound this procedure is waning out from practise.

ULTRASONOGRAM

It is a non-invasive procedure with more sensitivity and specificity in diagnosing hemoperitoneum. In places where USG is not available culdocentesis is still being practised.

Many recent studies from developing countries have shown that this simple procedure helped in the diagnosis of tubal ectopic pregnancy in more than 70-80% of cases.[15]

URINE PREGNANCY TEST

HCG is secreted from implanting blastocyst and appears first in blood 6-8 days after fertilisation. Their level reaches a peak by 7 – 10 weeks. Usually urine pregnancy test becomes positive 3-4 days after implantation; by 7 days 98 % will become positive.[16] The card test uses monoclonal antibody to beta subunit of HCG.

A negative urine pregnancy test does not exclude ectopic pregnancy, because the placental implantation in tubal location can be either nonviable or compromised. And if compromised they not able to secrete enough hCG for a positive pregnancy test. (Richard M. Soderstrom M.D).

Reason for the false negativity of the result arise in the fact that the urine concentration of the hCG core fragment which is a variant of hCG rise dramatically and this interferes with hCG detection.

SERUM B HCG CONCENTRATION

The gold standard to diagnose ectopic pregnancy is quantitative estimation of serum beta hCG. Its levels vary with the period of gestation. Usually in non pregnant state it is < 10 mIU/ml. 14 days after ovulation it is 100mIU/ml. It doubles every 48 – 72 hours. Its level are higher in multiple pregnancy.[17]

An ectopic pregnancy is more likely when an intrauterine gestational sac is not seen by transabdominal scan & when β-hCG concentration is above 6500 IU/L or by transvaginal scan at a β-hCG concentration of more than 1500 IU/L.[18]

TUBAL ABORTION

Tubal abortion is characterized by the extrusion of an ectopic product of conception implanted in the fallopian tube through the abdominal ostium into the peritoneal cavity. It can be either complete or incomplete and may lead to severe bleeding. The correct recognition is essential as it allows possible preservation of tubal function and fertility.

ROLE OF ULTRASOUND IN ECTOPIC

The revolutionary change in diagnosis of ectopic pregnancy is transvaginal ultrasound. The advantage of this is it confirms the clinical suspicion much earlier than trans abdominal ultrasound.

In TAS gestational sac is seen only when β hCG is > 6500 IU/L.[19] But with the help of transvaginal ultrasound the gestational sac is seen when the serum β hCG is as low was 1000 IU/L.

DIAGNOSTIC LAPROSCOPY

When USG is conclusive but an ectopic pregnancy is suspected a diagnostic laproscopy can be done. Delay in diagnostic laproscopy has been one of the causes of maternal mortality.[20]

MANAGEMENT

The main aim of treating ectopic pregnancy aggressively is to reduce maternal mortality. In 1888, Lawson first described the surgical management. The first conservative surgical procedure for the treatment was done with preservation of fallopian tube, described in 1953. The first reported case of medical management with methotrexate by Tanaka et al in 1982.

An ectopic pregnancy can be managed by any of the following method

1) Expectant management.
2) Medical management.
3) Surgical management.

EXPECTANT MANAGEMENT

The expectant management is successful in 57 % of pregnancies. It is implied in those patients who are haemodynamicaly stable and falling levels of β hCG more than 15 % within 24 – 48 hrs, with the first value being 1500 mIU/ml. The size of the

mass should be less than 3.5 cm with no cardiac activity. Weekly serum β hCG should be done and it usually takes 3 weeks for complete resolution of ectopic pregnancy.

Elito et al. (2005a) reported the tubal patency rate of around 78% in expectantly managed women, and it was similar to the results of other studies conducted by Stovall and debby. [21]

MEDICAL TREATMENT

The evergreen drug of choice is methotrexate an inhibitor of dihydrofolate reductase. Side effects commonly seen with multiple doses are gastritis, vomiting, giddiness, stomatitis. Folinic acid can be used to reduce side effects when multiple doses of methotrexate are used.

All routine basic investigations should be done prior to starting the treatment. Prerequistes are stable hemodynamic status, size of adnexal mass smaller than 3.5 cm, absence of cardiac activity, no significant pain, serum β hCG < 1500 IU/L.

Single and multiple dose regimen are used.

In single dose methotrexate 50 mg/m^2 is used. Follow up is done on days 1, 4, 7. Second dose is used in those with less than 15 % fall in the initial level. Those with more than 15 % fall in β hCG levels should be followed weekly till it reaches 5mIU / ml.

In multiple dose protocol 4 intramuscular injections of MTX 1mg/kg are given on alternate days with 4 IM doses of leucovorin (0.1 mg/kg). Serum β hCG levels are done on the day of MTX injections and it is continued till it reaches < 15 %.

FOLLOW UP

Serum β hCG levels are monitored continuously till it becomes negative. It usually takes 2 – 3 weeks for complete resolution of ectopic pregnancy after medical management.

SURGICAL MANAGEMENT

In comparison with laparoscopic procedures with conservative laparotomy procedures, in the long run laparoscopic management offered similar tubal patency rates, similar intrauterine pregnancy rates and a non significant reduction in the recurrence of ectopic pregnancy. Smaller, un-ruptured and less symptomatic tubal pregnancies are preferred for conservative surgery. The incidence of persistent trophoblasts was a little higher in those patients undergoing salphingotomy stated by Mol et al (1997). The chance of subsequent intrauterine pregnancy is not increased after salphingostomy compared with salpingectomy.[22] The use of conservative surgical techniques has a risk of minor tubal bleeding. Minimally invasive surgery is now considered gold standard for management of both stable and ruptured ectopic pregnancy. Recently salphingectomy is preferred with a healthy contralateral tube because of its higher success and there is no decrease in future fertility as compared with salphingotomy.[23]

A rapid decline in serum concentrations of β-hCG usually by 21- 35% or more over 2 days, is suggestive of spontaneous abortion [24] or a resolving ectopic gestation.

MATERIALS AND METHODS

STUDY AREA

This study was conducted at Government Mohan Kumaramangalam Medical college hospital GMKMCH – Salem, is a tertiary care centre and a teaching hospital. It is a main referral centre for 8 districts and all primary health centres in HOSUR, KRISHNAGIRI, DHARMAPURI, NAMMAKAL, ERODE, KALLAKURICHI, VILLUPURAM.

STUDY DESIGN

This study was a cross sectional study

SAMPLE SIZE

This study consists of 'n' no of ectopic pregnancy cases attended Government Mohan Kumaramangalam Medical college hospital GMKMCH – Salem for a particular period of time

DURATION OF STUDY

From January 2020 to December 2021 for a period of 2 years

INCLUSION CRITERIA

All women with suspected clinical diagnosis and evidently diagnosed as ectopic pregnancy, between the reproductive age group of 15 -45yrs of age

EXCLUSION CRITERIA

No specific exclusion criteria

MATERIALS AND METHODS

Proforma was used to collect information from patients via direct questionnaire detailed history taking and relevant physical examination done.

A detailed history was taken from hemodynamically unstable patient retrospectively. After taking history physical examination was done especially for vital signs, abdominal examination, per vaginal examination, cervical excitation test and culdocentesis when needed.

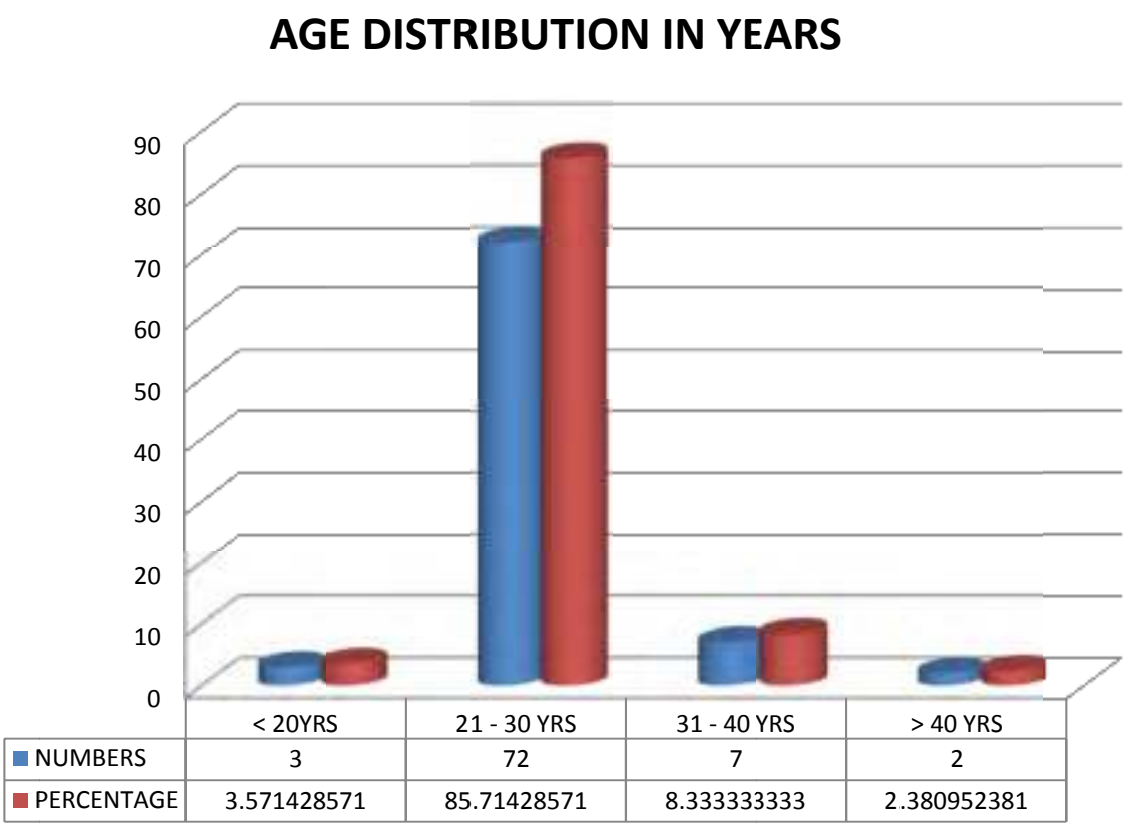
The basic investigations including haemoglobin, renal function test, blood grouping and Rh typing, urine pregnancy test and ultrasound examination were done in all patients. Additional investigations like serum beta hCG were given.

All data were collected on a structural proforma (sample enclosed) and analysed for descriptive statistics. Information regarding patient profile , risk factors , sterilisation status , use of other contraceptive methods , presenting symptoms and signs , physical examination , ultrasound findings , types of treatment , per operative findings , no of transfusions , post operative morbidity and length of hospital stay were analysed.

Post operatively HPE reports were collected from the pathology department and final diagnosis was made. Data were summarised in tables and figures.

RESULTS

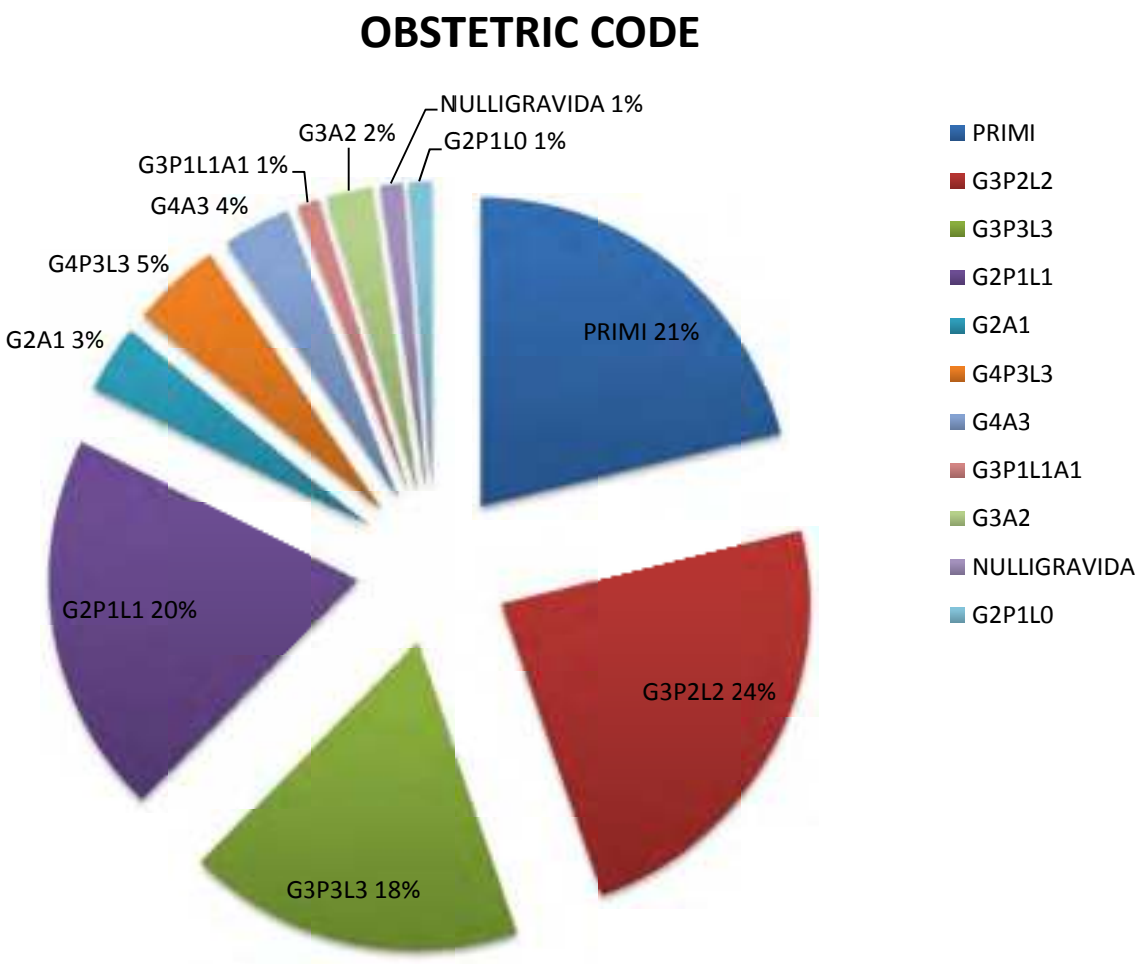
FIG 1: DISTRIBUTION ACCORDING TO AGE GROUP



	< 20YRS	21 - 30 YRS	31 - 40 YRS	> 40 YRS
NUMBERS	3	72	7	2
PERCENTAGE	3.571428571	85.71428571	8.333333333	2.380952381

85.7 % of the study population belongs to 21 – 30 years of age. 7 patients were between 31- 40 years of age and 2 patients were > 40 yrs of age

FIG 2 : DISTRIBUTION ACCORDING TO OBSTETRIC CODE



Among the study population 21% were primigravida, 10% had history of abortions and the remaining were multigravida.

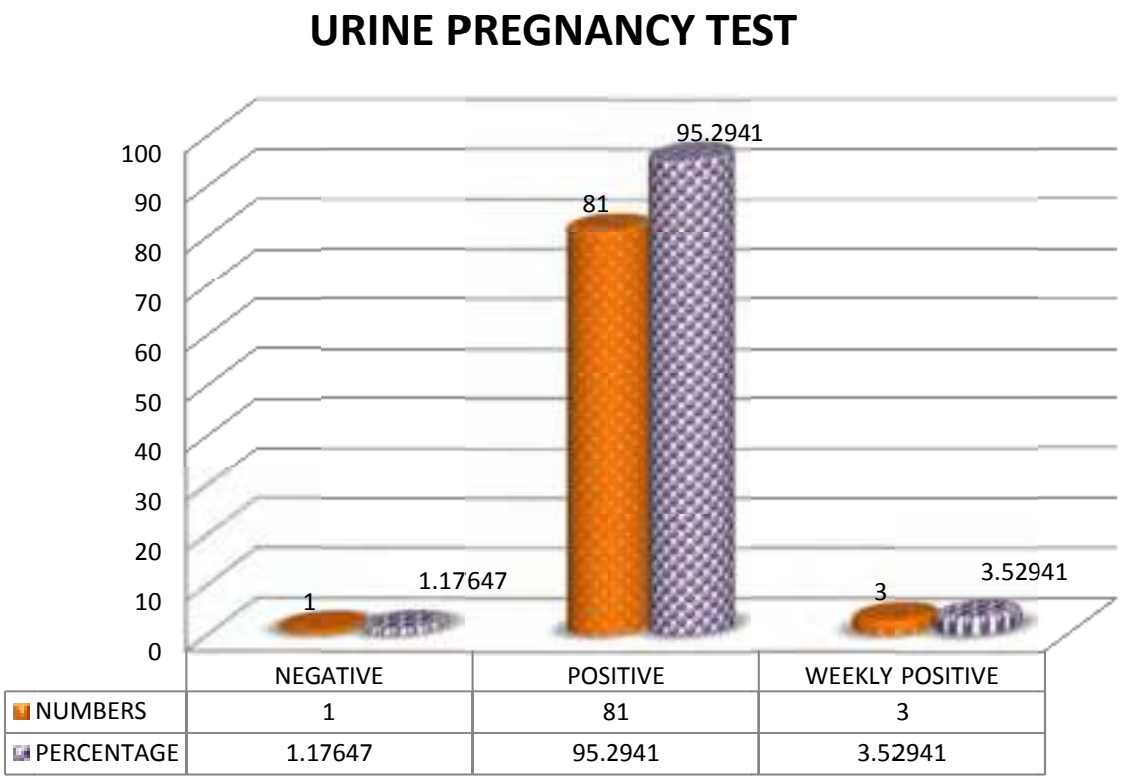
TABLE 1 : ACCORDING TO THE NATURE OF MENSTRUAL CYCLES

MENSTRUAL CYCLES

NATURE OF CYCLES	NO. OF CASES	PERCENTAGE
IRREGULAR CYCLES	11	12.9
REGULAR CYCLES	74	87.1

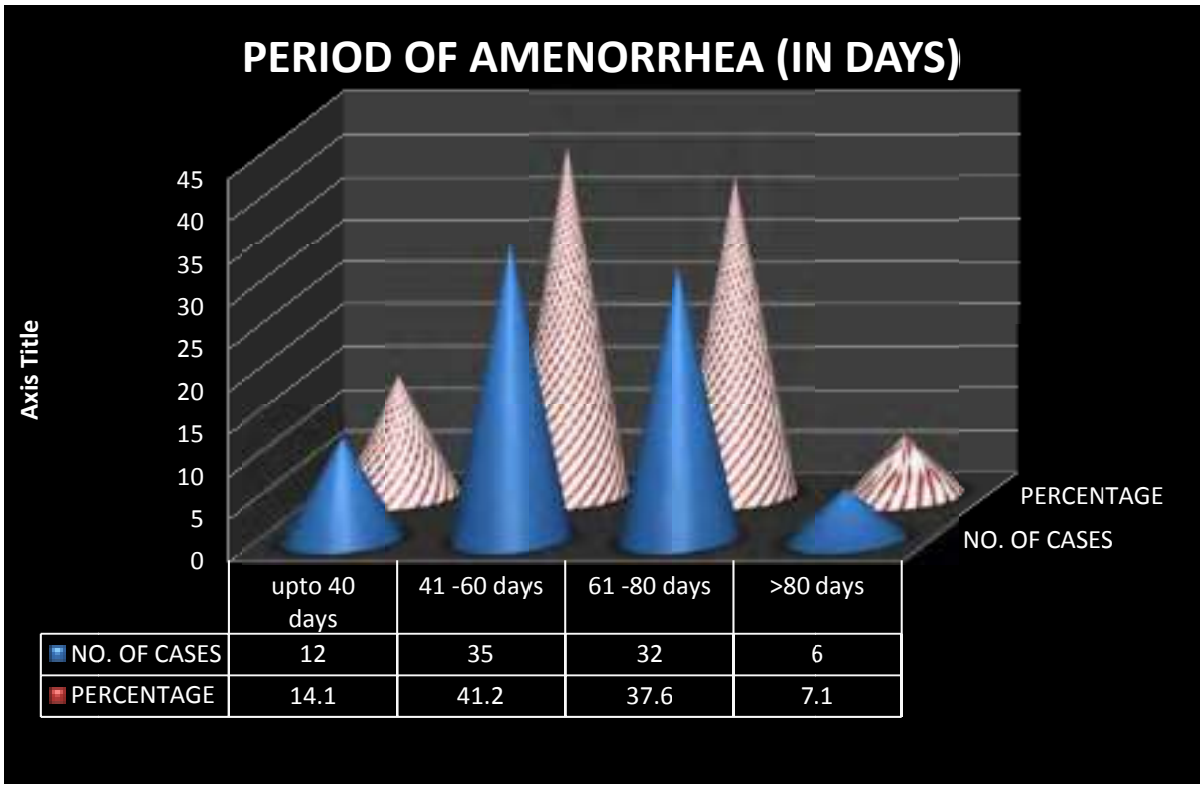
87.1 % had regular cycles and 12.9 % had irregular cycles.

FIG 3: DISTRIBUTION ACCORDING TO URINE PREGNANCY TEST



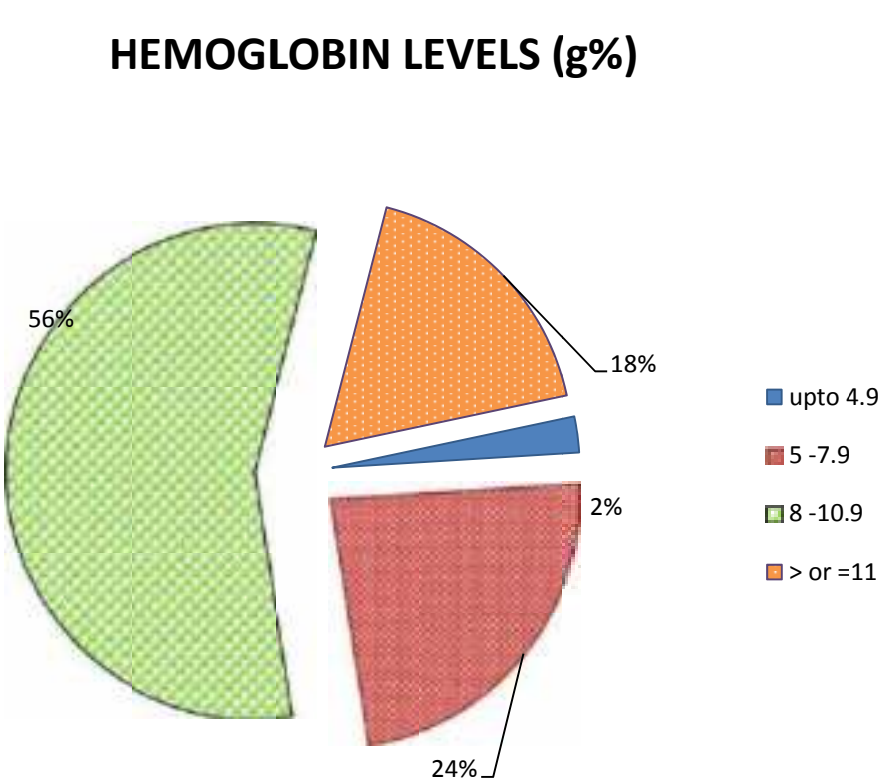
Among the study population 3.5% had weekly positive urine pregnancy test. 1% presented with negative.

FIG 4 : CLASSIFICATION BASED ON PERIOD OF AMENORRHEA



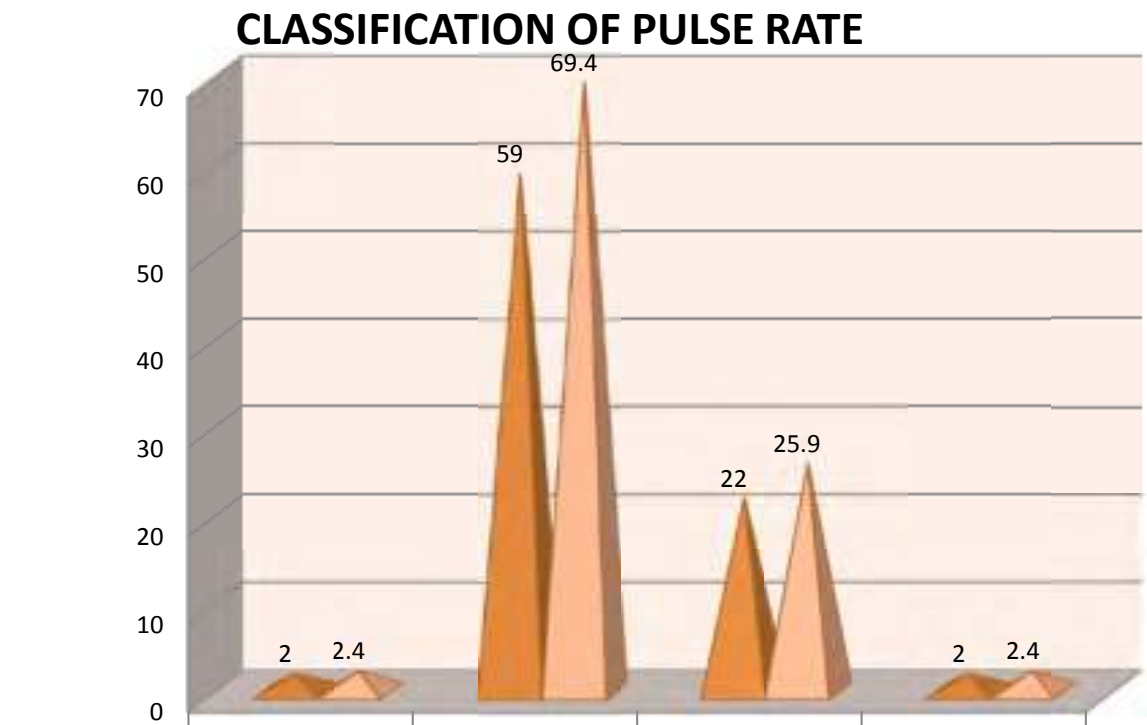
41.2 % patients presented with > 5weeks to 8 weeks of amenorrhoea. 37.6% presented with > 8 weeks to 11 weeks of amenorrhoea. 7.1% patients had > 11 weeks of amenorrhea.

FIG 5 : CLASSIFICATION BASED ON HEMOGLOBIN LEVELS



56% patient had Hb – 8 – 10.9 g%, 24% patients had Hb – 5 – 7.9 g%. In total only 18% patients were not anaemic in the study population.

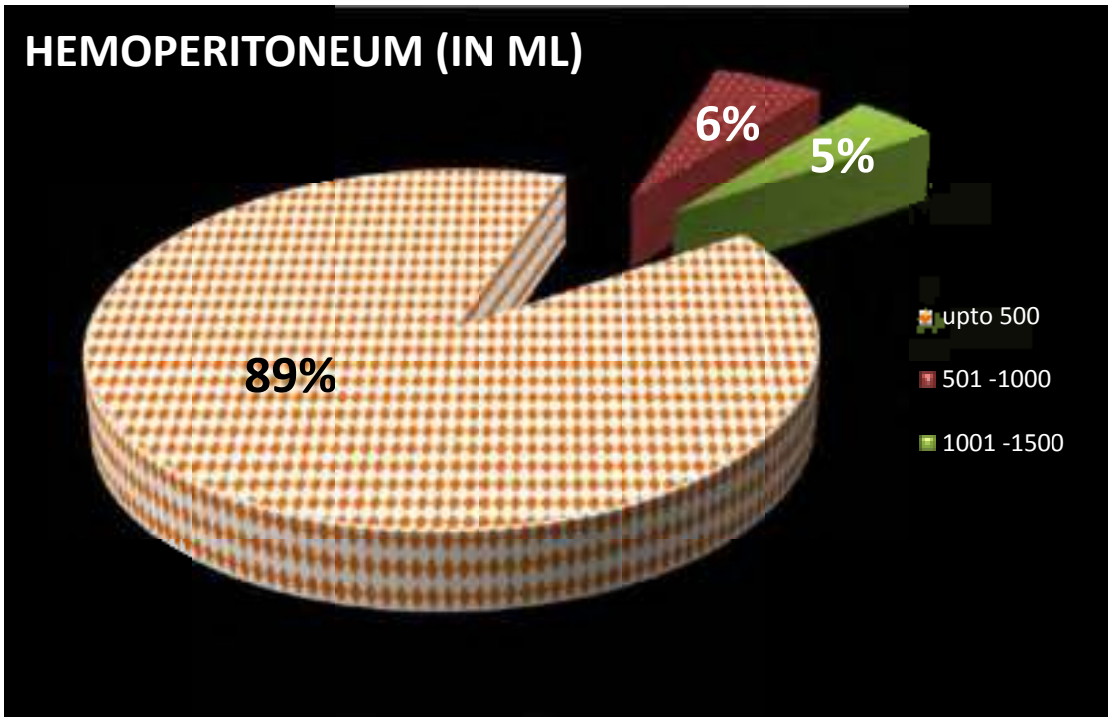
FIG 6 : CLASSIFICATION BASED ON PULSE RATE



	upto 70	71 -100	101 -120	above 120
NO.OF CASES	2	59	22	2
PERCENTAGE	2.4	69.4	25.9	2.4

28 % patients presented with tachycardia. Among which 2.4% of patients had pulse rate more than 120 beats / min. 69.4% of patients presented with pulse rate of 71 – 100 beats / min

FIG 7 : DISTRIBUTION ACCORDING TO HEMOPERITONEUM



Upto 500 ml of hemoperitoneum was present in 895 of patients. 5% had hemoperitoenum > 1000ml ,6% had hemoperitoneum of > 500 ml but < 1000ml.

TABLE 2 : BASED ON CLINICAL STATUS OF PATIENTS ON EXAMINATION

CLINICAL STATUS OF PATIENT ON EXAMINATION

CLINICAL STATUS	NO. OF CASES	PERCENTAGE
NO PALLOR	23	27.1
PALLOR	62	72.9

Clinical pallor status in 72.9% of patients is present.

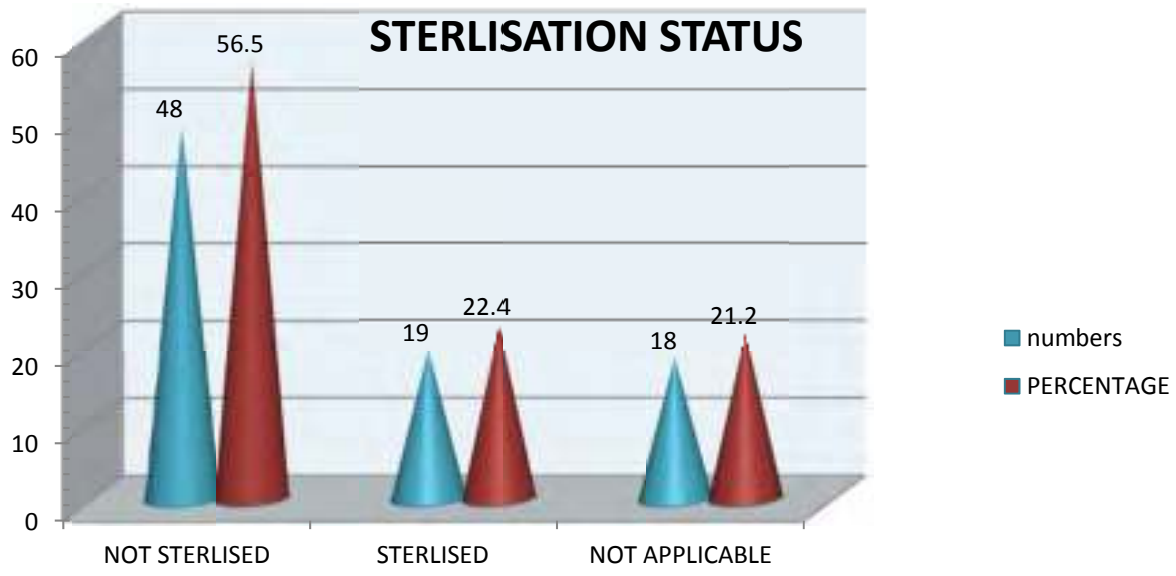
TABLE 3 : CLASSIFICATION BASED ON BLOOD PRESSURE

BLOOD PRESSURE

BLOOD PRESSURE IN mmHg	NO. OF CASES	PERCENTAGE
< 90/60	12	14.1
>100/60	73	85.8

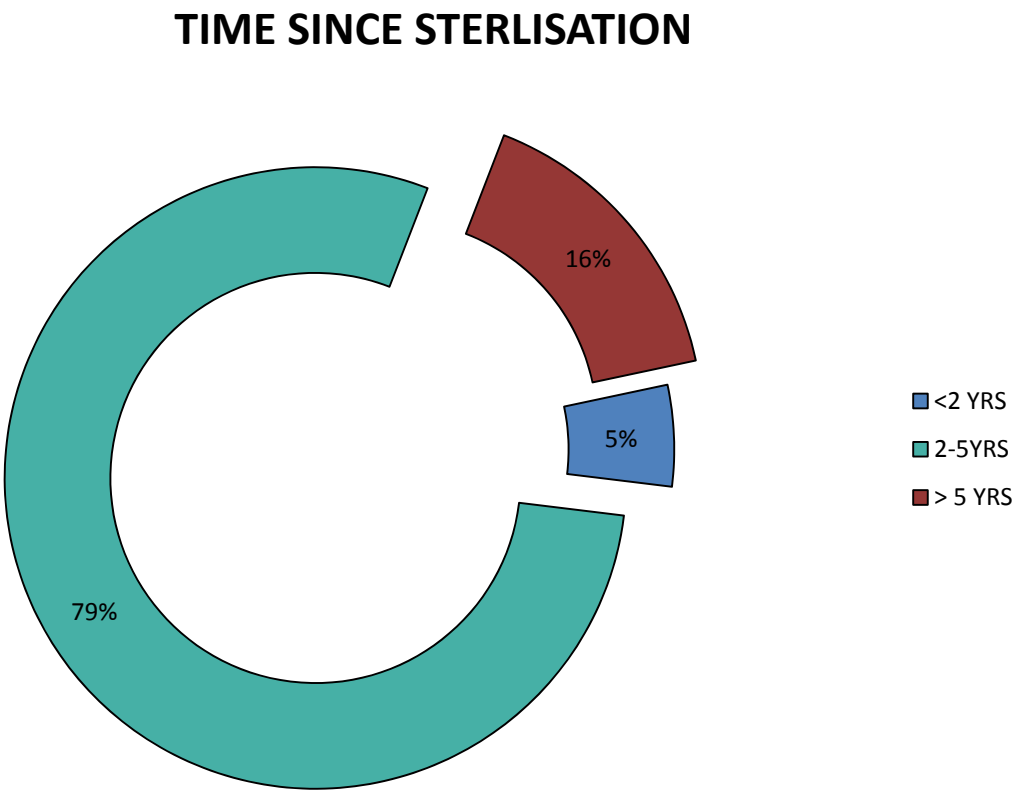
14.1 % of patients presented in hypotension and 85.8 % had normal blood pressure readings.

FIG 8 : DISTRIBUTION OF POPULATION BASED ON STERLISATION STATUS



In the study population 19 (22.4 %) were sterilised and 56.5% not sterilised.

FIG 9 : DIVISION ACCORDING TO TIME SINCE STERLISATION



Among those underwent sterilisation the presence of ectopic is 79% within 2- 5 years, 5% in those < 2 years and 16% > 5 years.

FIG 10 : PRESENCE OF RISK FACTORS AMONG THE STUDY POPULATION

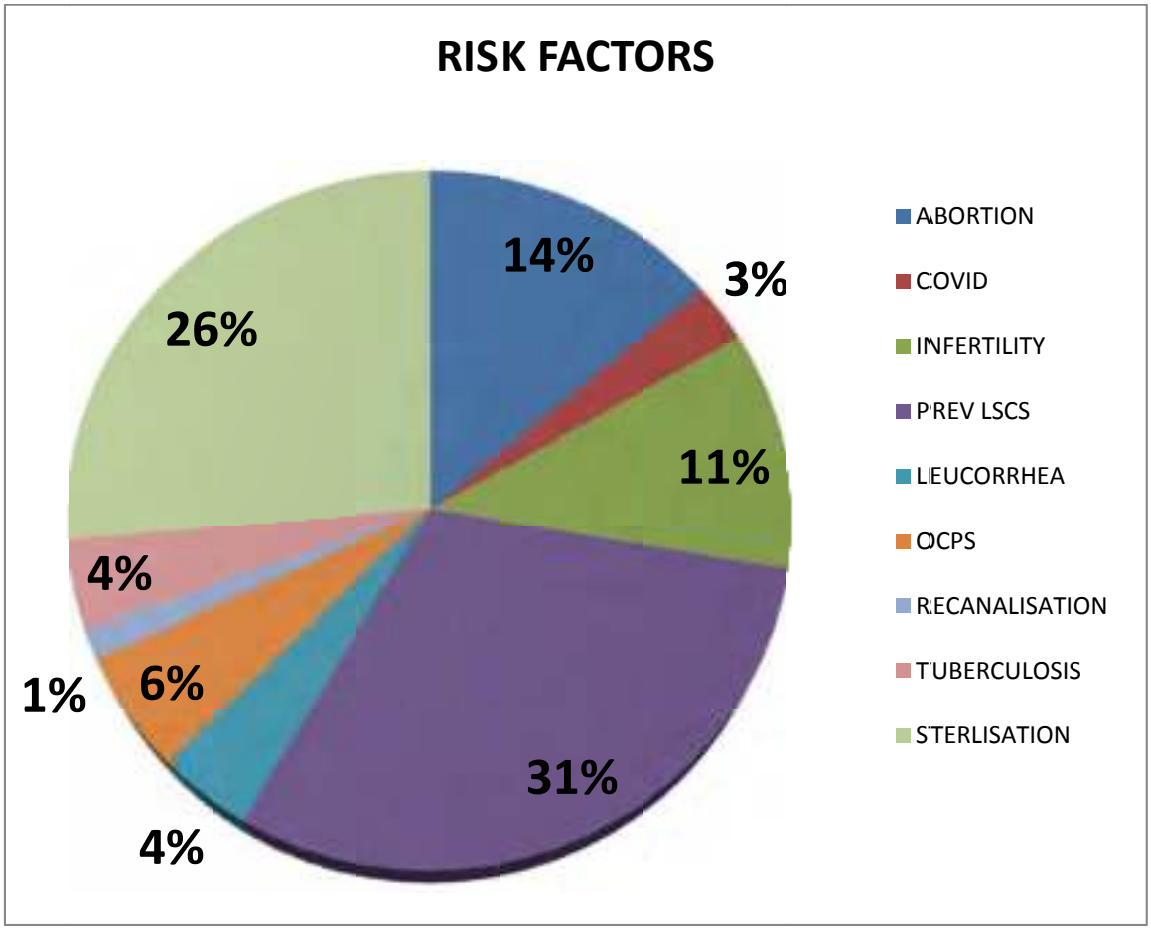
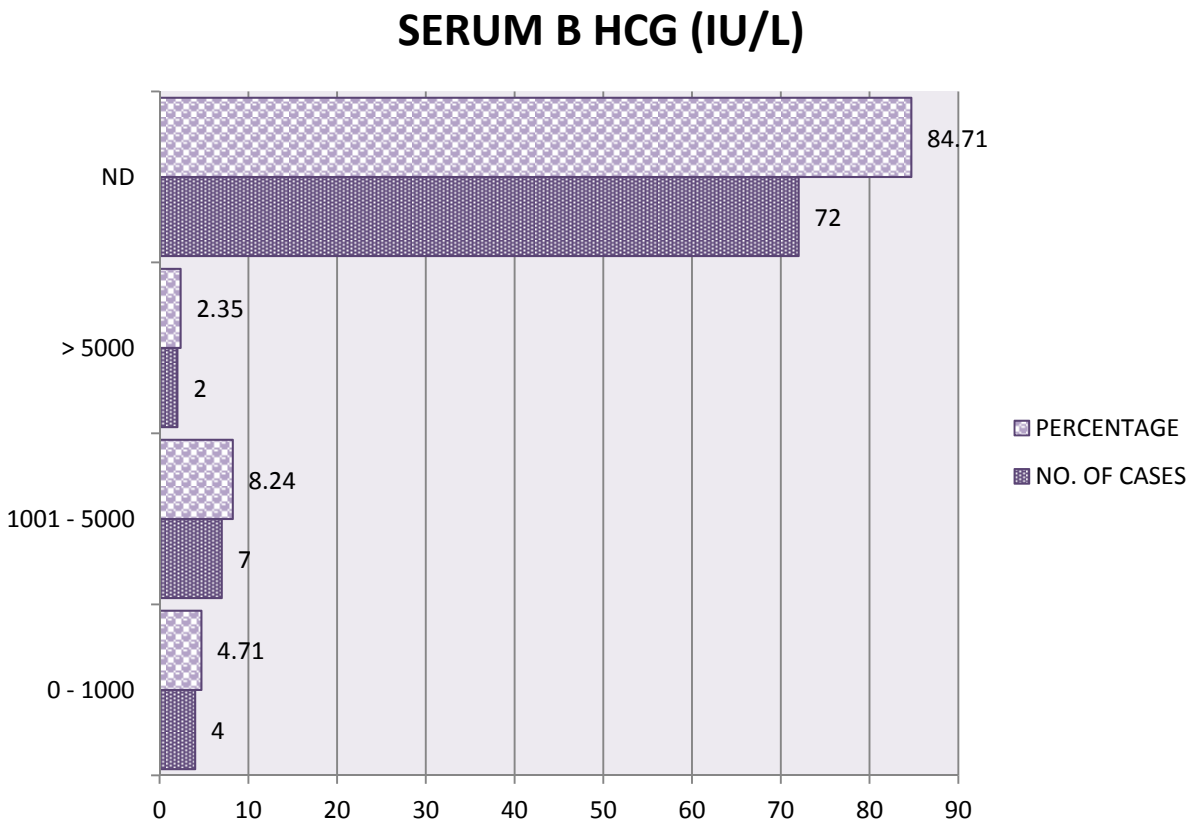


TABLE 4 : CLASSIFICATION OF VARIOUS RISK FACTORS

S.NO	RISK FACTORS	NUMBER OF PATIENTS
1	ABORTION	10
2	COVID	2
3	INFERTILITY	8
4	PREV LSCS	22
5	LEUCORRHEA	3
6	OCPS	4
7	RECANALISATION	1
8	TUBERCULOSIS	2
9	STERLISATION	19

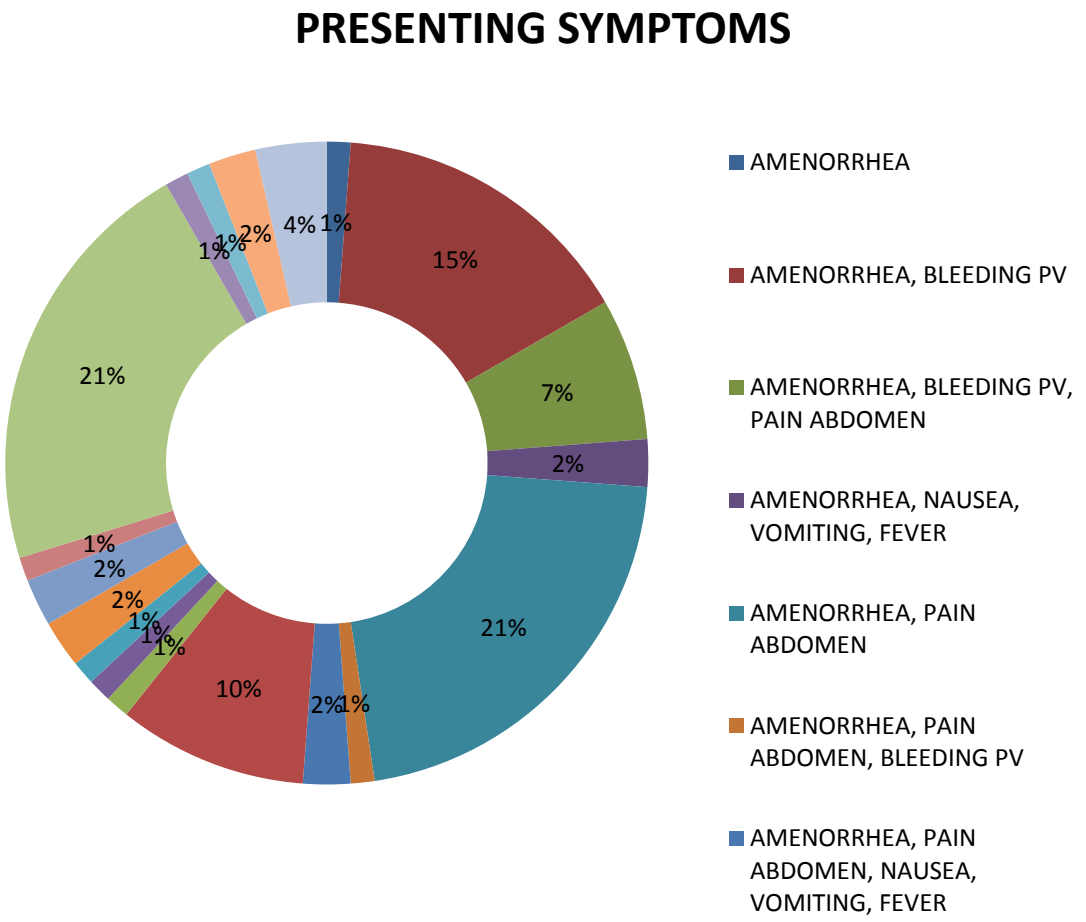
Among those Patients evaluated for risk factors previous LSCS (22) was the most common one followed by tubal sterilisation (19) with one patient underwent recanalization. 10 patients had h/o abortion.

FIG 11 – DISTRIBUTION ACCORDING TO THE VALUES OF BETA HCG



Serum beta HCG was not done in 84.71 % patients. Among those done 8.24 % had values between 1001 - 5000. And 2 patients had > 5000 IU /L

FIG 12 – DISTRIBUTION OF VARIOUS SYMPTOMS OF PRESENTATION

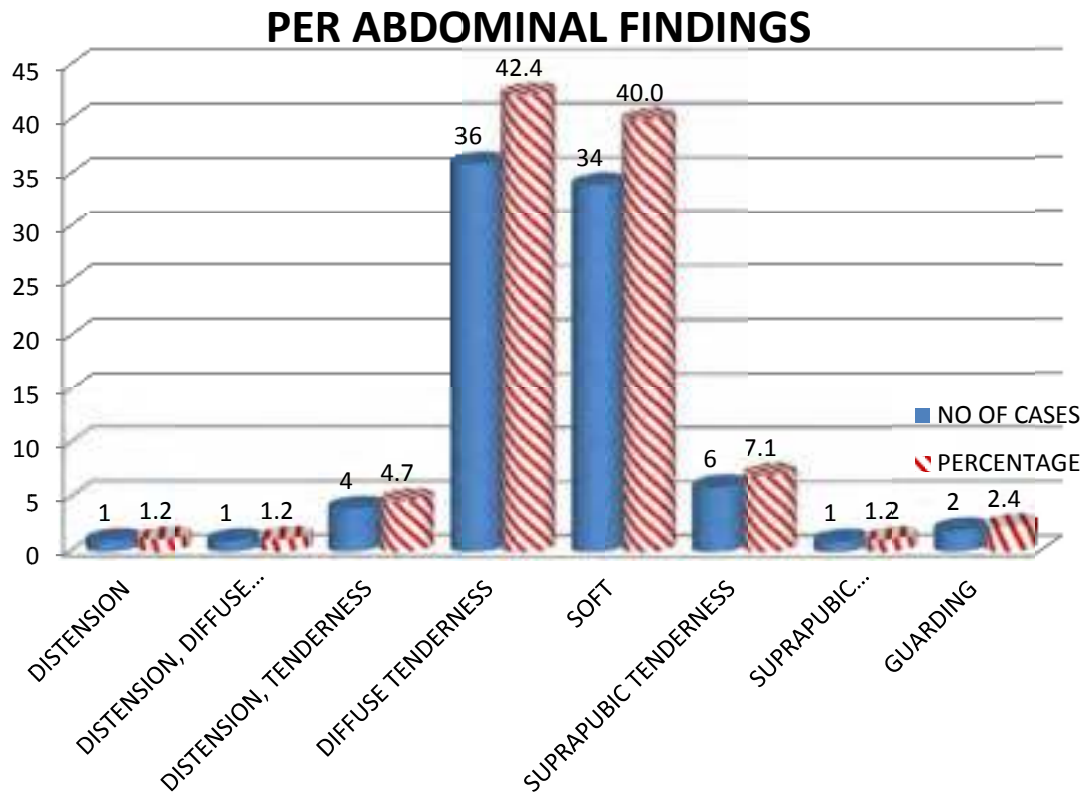


CLASSIC triad of ectopic pregnancy was seen in only 7% of patients. Other symptoms like nausea , vomiting , fever and a mixed presentation of symptoms which are tabulated below

TABLE 5: DISTRIBUTION BASED ON THE PRESENCE OF VARIOUS SYMPTOMS

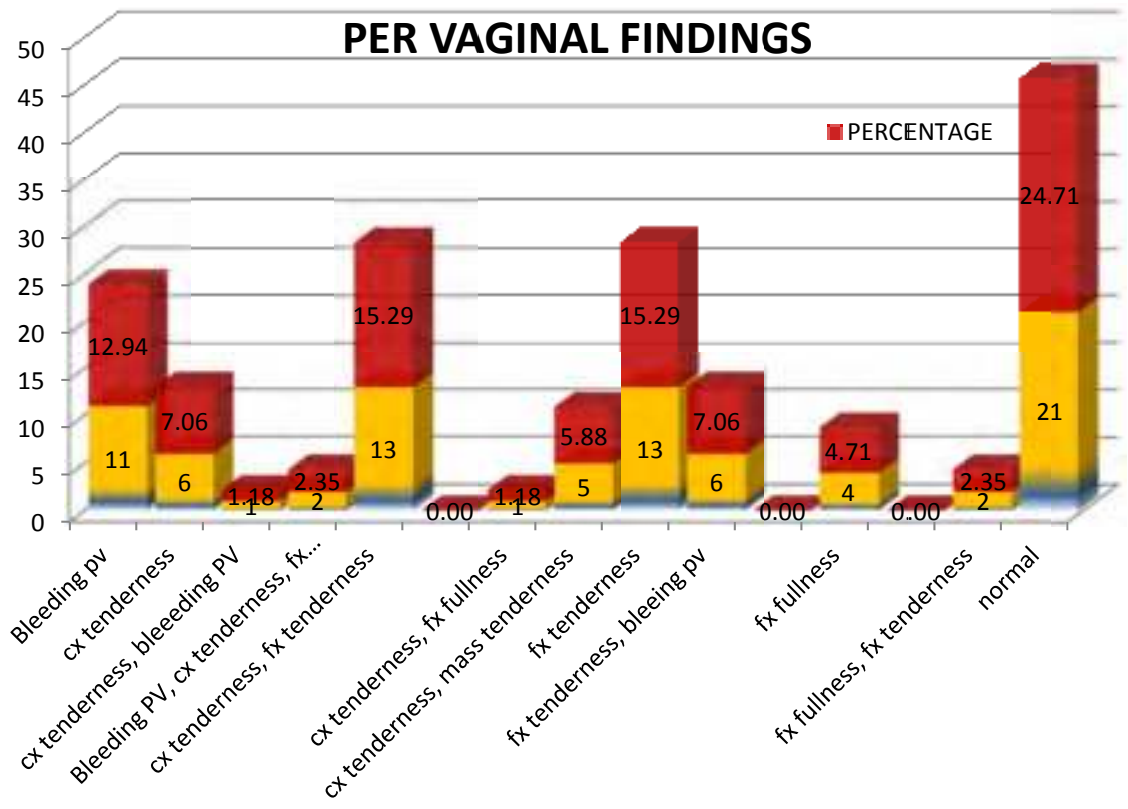
S.NO	SYPMTOMS	NO. OF CASES	PERCENTAGE
1.	AMENORRHEA	1	1.18
2.	AMENORRHEA, BLEEDING PV	13	15.29
3.	AMENORRHEA, BLEEDING PV, PAIN ABDOMEN	7	8.06
4.	AMENORRHEA	1	1.18
5.	AMENORRHEA, PAIN ABDOMEN	18	21.18
6.	AMENORRHEA, PAIN ABDOMEN, NAUSEA, VOMITING, FEVER	2	2.35
7.	BLEEDING PV, PAIN ABDOMEN	8	9.41
8.	BLEEDING PV, PAIN ABDOMEN, FEVER	1	1.18
9.	BLEEDING PV, PAIN ABDOMEN, NAUSEA	1	1.18
10.	BLEEDING PV, PAIN ABDOMEN, NAUSEA, VOMITING	1	1.18
11.	BLEEDING PV, PAIN ABDOMEN, NAUSEA, VOMITING, FEVER	2	2.35
12.	SPOTTING	2	2.35
13.	DISTENSION, FEVER	1	1.18
14.	PAIN ABDOMEN	18	21.18
15.	PAIN ABDOMEN, NAUSEA	1	1.18
16.	PAIN ABDOMEN, NAUSEA, FEVER	1	1.18
17.	PAIN ABDOMEN, NAUSEA, VOMITING	2	2.35
18.	PAIN ABDOMEN, NAUSEA, VOMITING, FEVER	3	3.53

FIG 13 : ABDOMINAL EXAMINATION FINDINGS



40% patients had no abdominal findings. 42.4 % had diffuse tenderness, whereas the remaining presented with various combinations of distension and tenderness

FIG 14 : VAGINAL EXAMINATION FINDINGS



15 % Patients presented with cervical motion tenderness and forniceal tenderness each respectively. 24.7% of patients had normal per vaginal findings. Blood on examing finger presented in only 12.94% of patients.

TABLE 6: TRANSFUSION DETAILS

BLOOD TRANSFUSION	NO. OF CASES	PERCENTAGE
YES	80	94.1
NO	5	5.9

94.1 % of patients transfusion done. Remaining 5 patients required no transfusions

TABLE 7 : UNITS OF BLOOD AND COMPONENTS TRANSFUSION

S.NO	BLOOD AND BLOOD PRODUCTS	NO. OF UNITS TRANSFUSED	TOTAL UNITS TRANSFUSED
1	1 PRBC	36	1
2	2 PRBC	13	2
3	3 PRBC	3	3
4	1 PRBC, 4 FFP	4	5
5	2 PRBC 4 FFP	8	6
6	2 PRBC 2 FFP	3	4
7	2 PRBC, 4 CRYOPRECIPATE	1	6
8	4 PRBC, 4 FFP	6	8
9	4 PRBC, 4 FFP, 4 PLATELETS	5	12

5 Patients required more than more than 10 units of blood and blood products transfusion. About 27 patients required more than 5 units of blood and blood products transfusion.

TABLE 8: CLASSIFICATION BASED ON ULTRASONOGRAM FINDINGS

S.NO	USG FINDINGS	NO.OF PATIENTS	PERCENTAGE
1	MINIMAL FREE FLUID	15	17.65
2	MODERATE FREE FLUID	38	44.71
3	MASSIVE HEMOPERITONEUM	5	5.88
4	NO FREE FLUID	10	11.76
5	ILL DEFINED ECHOGENIC MASS	12	14.12
6	ADNEXAL MASS	22	25.88

In total about 68 % patients presented with features of hemoperitoneum like mild, moderate and massive hemoperitoneum. Features of well defined adnexal mass 25.8 %, ill defined mass in 14.12 %.

STATISTICAL CALCULATION

PEARSON CORRELATION COFEFFICIENT

X- USG FINDINGS, Y – TRANSFUSION DETAILS

X Values	Y Values	X - Mx	Y - My	(X - Mx)2	(Y - My)2	(X - Mx)(Y - My)
5	5	-13.400	-10.600	179.560	112.360	142.040
38	28	19.600	12.400	384.160	153.760	243.040
15	10	-3.400	-5.600	11.560	31.360	19.040
22	20	3.600	4.400	12.960	19.360	15.840
12	15	-6.400 Mx: 18.400	-0.600 My : 15.600	40.960 Sum: 629.200	0.360 Sum: 317.200	3.840 Sum: 423.800

Result Details & Calculation

X Values

$\sum = 92$

Mean = 18.4

$\sum(X - Mx)2 = SSx = 629.2$

Y Values

$\sum = 78$

Mean = 15.6

$\sum(Y - My)2 = SSy = 317.2$

X and Y Combined

N = 5

$\sum(X - Mx)(Y - My) = 423.8$

R Calculation

$$r = \sum((X - My)(Y - Mx)) / \sqrt{((SSx)(SSy))}$$

$$r = 423.8 / \sqrt{((629.2)(317.2))} = 0.9486$$

Meta Numerics (cross-check)

r = 0.9486Key

X: X Values

Y: Y Values

Mx: Mean of X Values

My: Mean of Y Values

X - Mx & Y - My: Deviation scores

(X - Mx)2 & (Y - My)2: Deviation Squared

(X - Mx)(Y - My): Product of Deviation Scores

The value of R is 0.9486.

Result Details & Calculation

X Values

$\sum = 92$

Mean = 18.4

$\sum(X - M_x)^2 = SS_x = 629.2$

Y Values

$\sum = 78$

Mean = 15.6

$\sum(Y - M_y)^2 = SS_y = 317.2$

X and Y Combined

$N = 5$

$\sum(X - M_x)(Y - M_y) = 423.8$

R Calculation

$r = \sum((X - M_y)(Y - M_x)) / \sqrt{((SS_x)(SS_y))}$

$r = 423.8 / \sqrt{((629.2)(317.2))} = 0.9486$

Meta Numerics (cross-check)

r = 0.9486

Key

X: X Values

Y: Y Values

M_x: Mean of X Values

M_y: Mean of Y Values

$X - M_x$ & $Y - M_y$: Deviation scores

$(X - M_x)^2$ & $(Y - M_y)^2$: Deviation Squared

$(X - M_x)(Y - M_y)$: Product of Deviation Scores

The value of R is 0.9486.

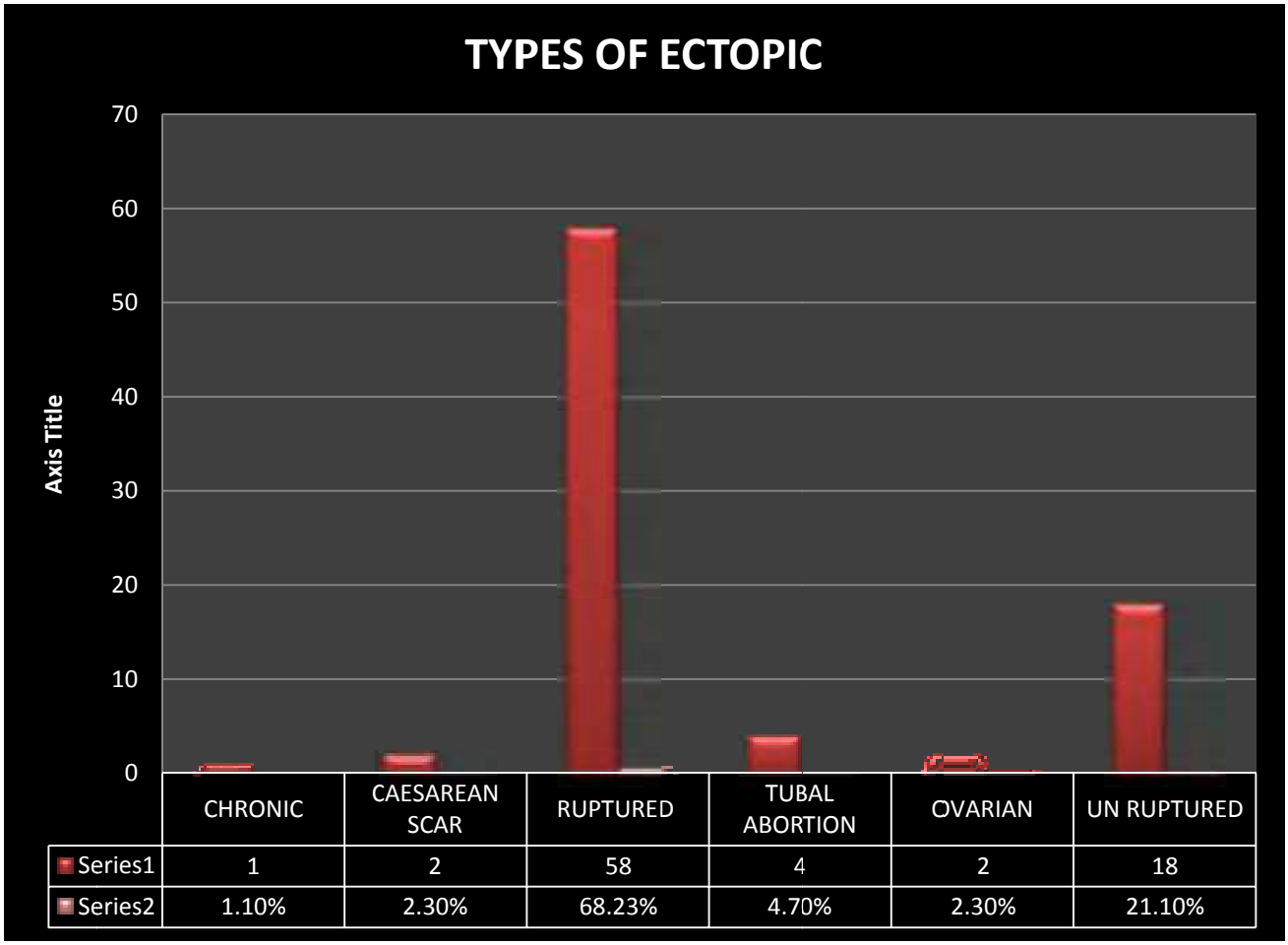
This is a strong positive correlation, which means that high X variable scores go with high Y variable scores (and vice versa).

The value of R^2, the coefficient of determination, is 0.8998.

The P-Value is < .00001. The result is significant at $p < .01$

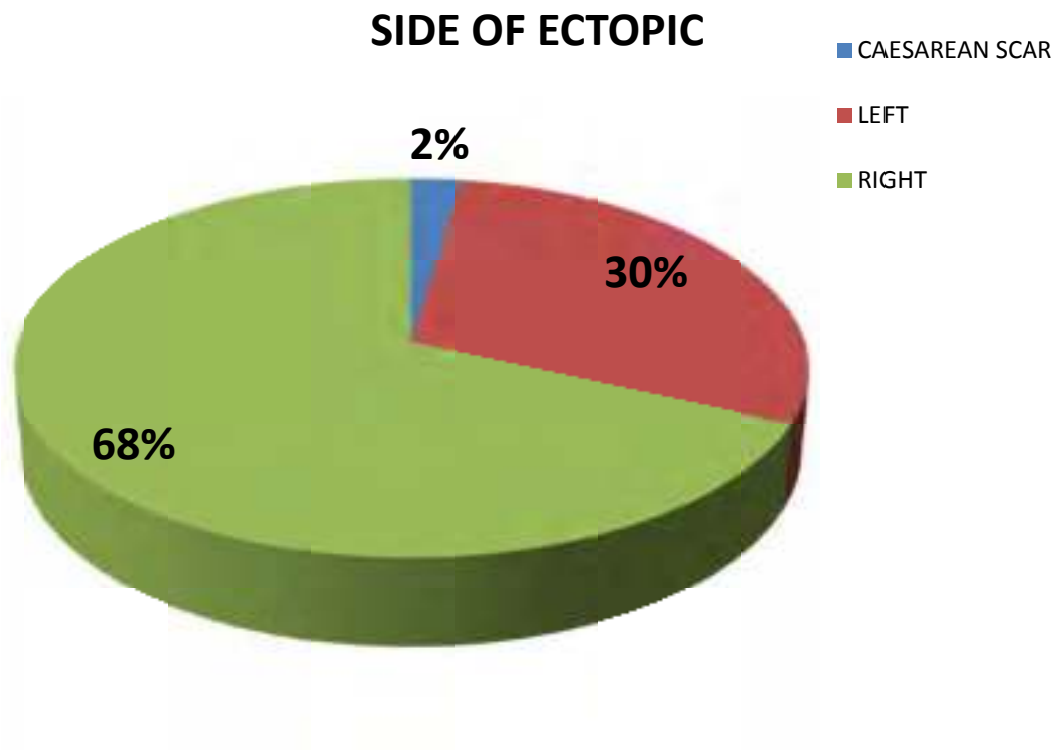
Where R is 0.948 and N = 85

FIG 15 : BASED ON TYPES OF ECTOPIC PREGNANCY



68.23 % of patients had ruptured ectopic, 21.1 % had un ruptured. 2.3% had caesarean scar pregnancy, 2.3% had ovarian pregnancy, 4.70 % had tubal abortion and 1 patient was chronic ectopic pregnancy.

FIG 16 – BASED ON SIDE OF ECTOPIC PREGNANCY



68 % had right side ectopic whereas 30 % patients had left side ectopic

TABLE 9 : DISTRIBUTION ACCORDING TO SITE OF ECTOPIC PREGNANCY

SITE OF ECTOPIC	NO. OF CASES	PERCENTAGE
AMPULLA	43	50.6
CORNUA	2	2.4
FIMBRIA	8	9.4
ISTHUMUS	17	20.0
NA (not applicable)	6	7.1
OVARY	2	2.4
SCAR SITE	2	2.4
TUBAL INTERSTITIUM	5	5.9

50 & of cases the site of ectopic was ampulla, 20 % of cases the site of ectopic was isthumus, the next common sit of ectopic was fimbria in about 9% of patients. Cornual pregnancy is seen in 2% of patients.

FIG 17: BASED ON THE SITE OF ECTOPIC PREGNANCY

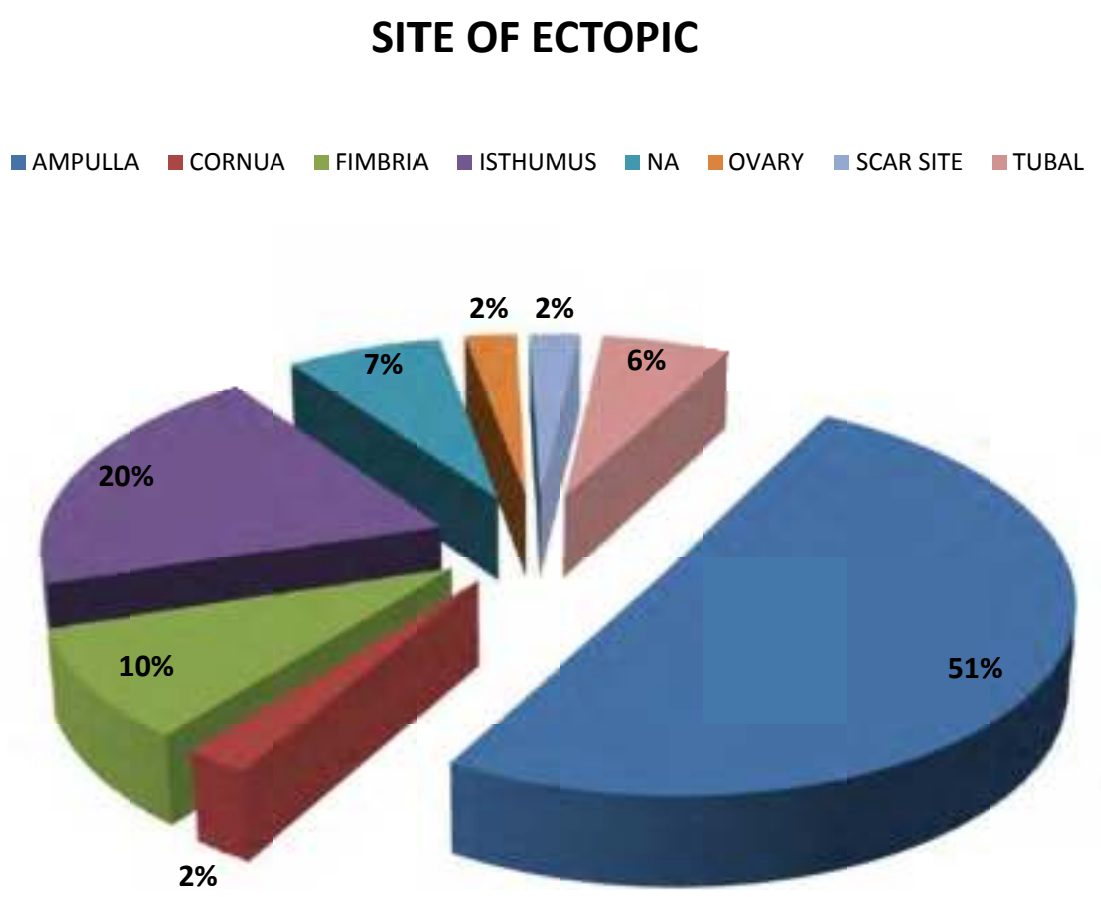


FIG 18 – BASED ON THE VARIOUS MANAGEMENT OFFERED

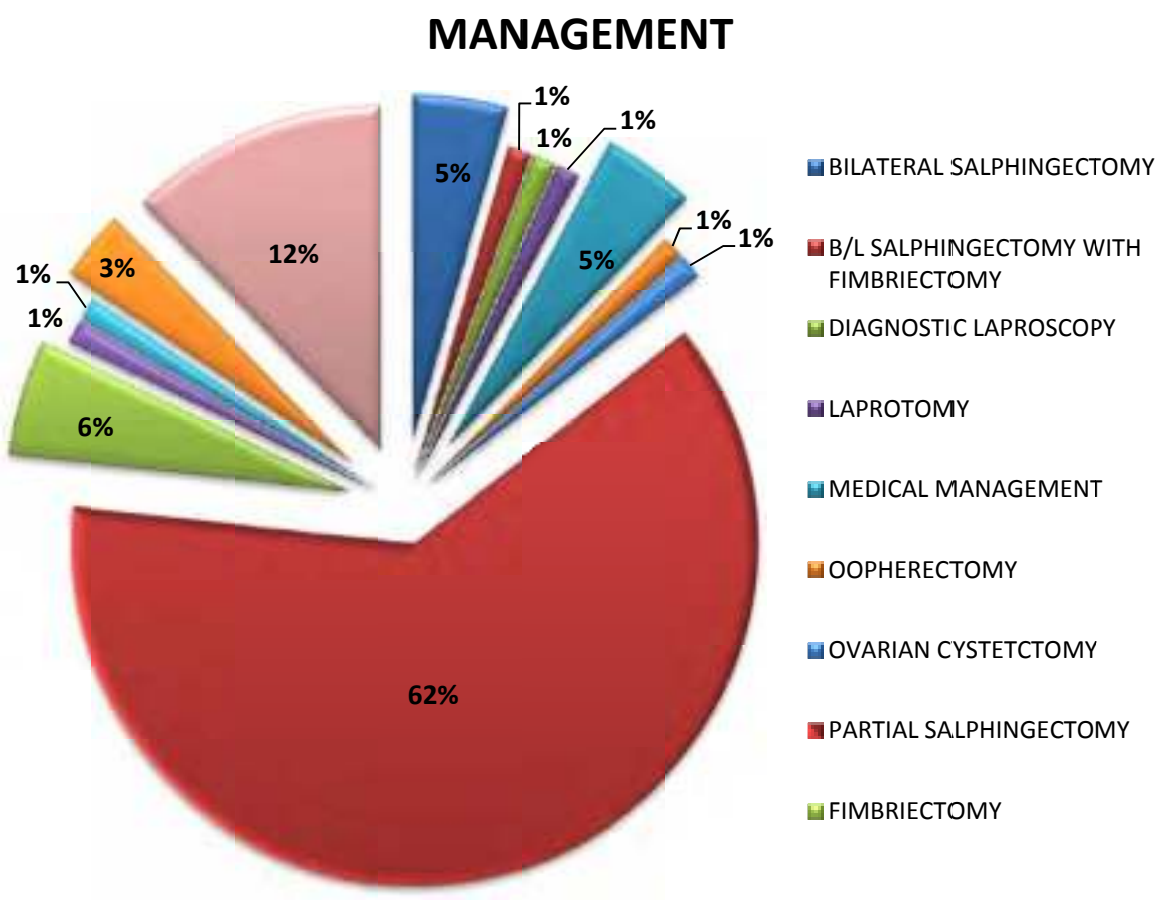


TABLE 10 : DISTRIBUTION DEPENDING ON THE MANAGEMENT OF ECTOPIC PREGNANCY

MANAGEMENT	NO. OF CASES	PERCENTAGE
BILATERAL SALPHINGECTOMY	4	4.71
B/L SALPHINGECTOMY WITH FIMBRIECTOMY	1	1.18
DIAGNOSTIC LAPROSCOPY	1	1.18
LAPROTOMY	1	1.18
MEDICAL MANAGEMENT	4	4.71
OOPHERECTOMY	1	1.18
OVARIAN CYSTECTOMY	1	1.18
PARTIAL SALPHINGECTOMY	56	65.88
FIMBRIECTOMY	5	5.88
PARTIAL SALPHINGECTOMY WITH OVARIAN CYSTETCTOMY	1	1.18
SUCTION EVACUATION	1	1.18
SALPHINGO OOPHERECTOMY	3	3.53
TOTAL SALPHINGECTOMY	11	12.94

The commonest management done is partial salphingectomy in abour 65.8 %. About 12.9 % total salphingectomy done. Fimbriectomy was done in 5 patients either isolated or in combination with other procedures.

FIG 19 : USG PICTURE SHOWING EMPTY UTERINE CAVITY WITH ADNEXAL MASS SHOWING FETUS

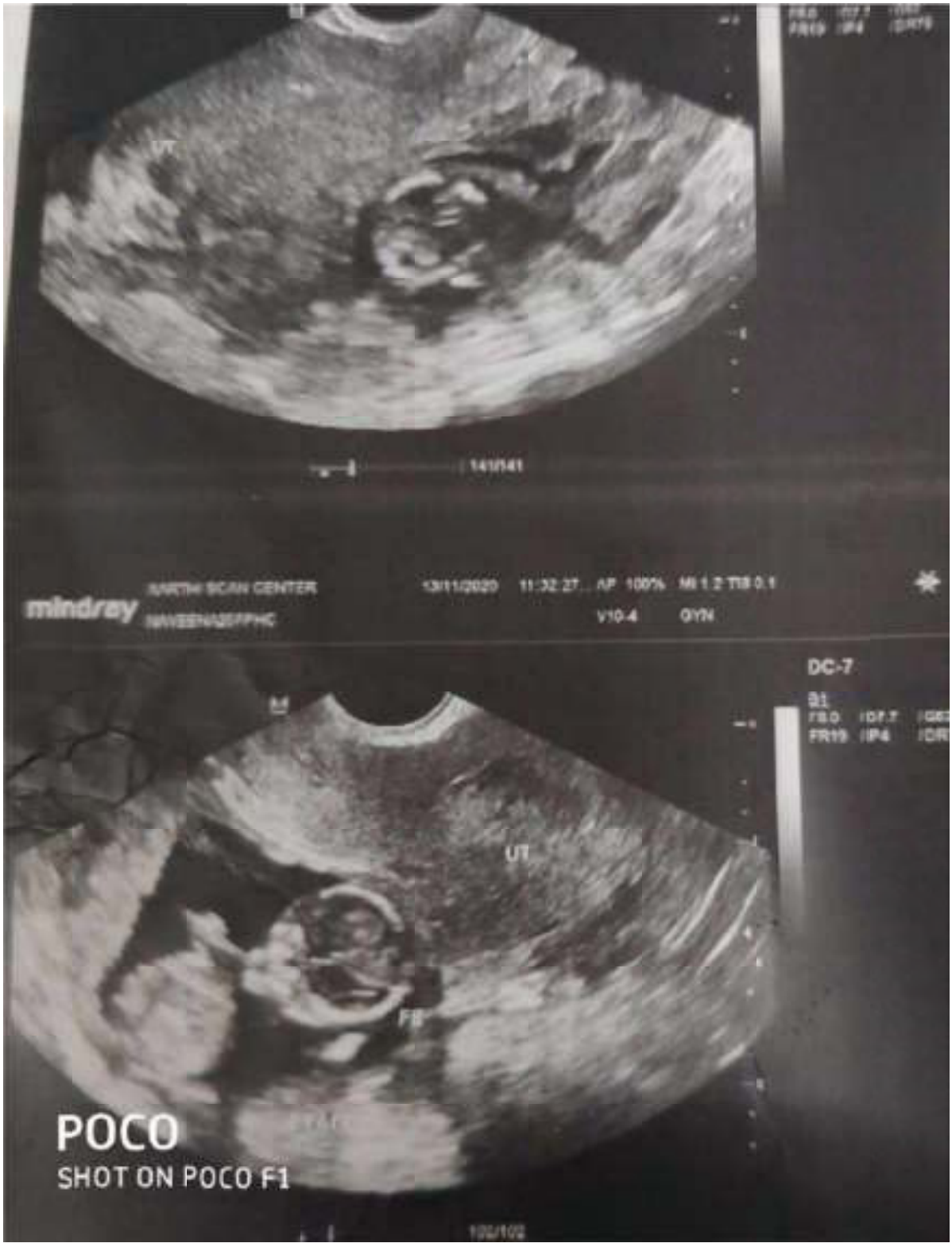


FIG 20 A & B : ADNEXAL MASS WITH FEOTAL POLE AND CARDIAC ACTIVITY SEEN WITH CRL MEASURING 9 WEEKS GESTATION

C (1,2 &3)– CERVICAL PREGNANCY

FIG 20 A

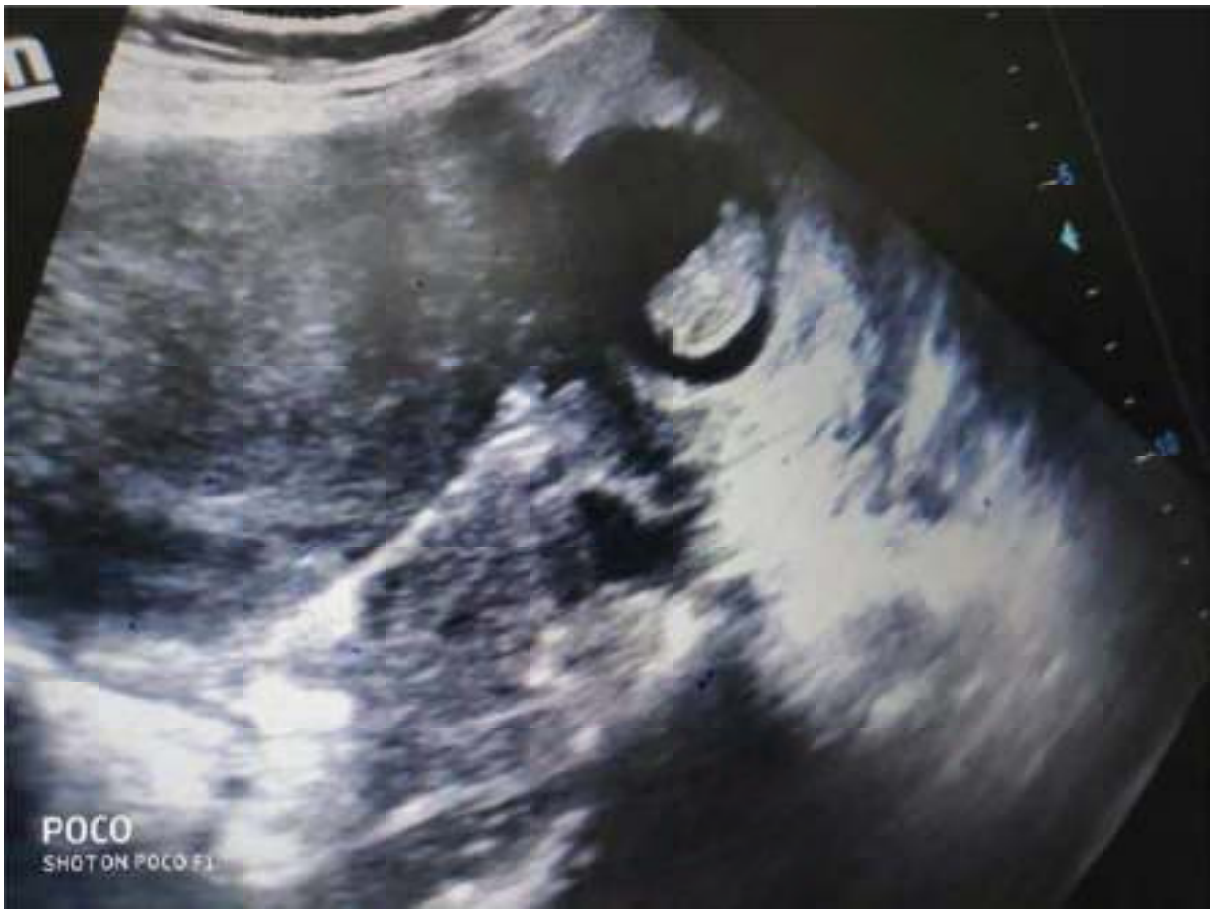


FIG 20 B

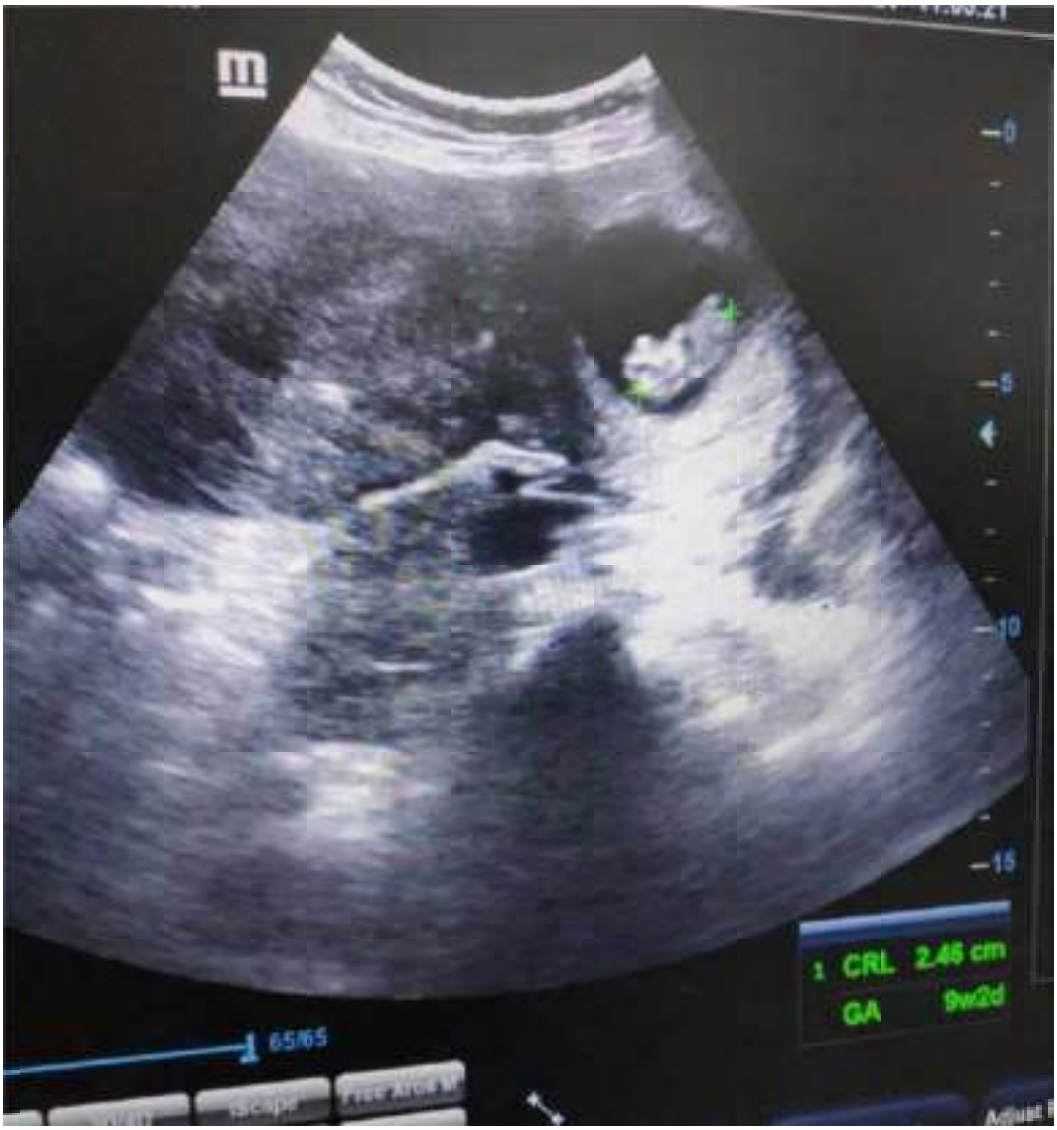


FIG 20 C1 – CERVICAL PREGNANCY

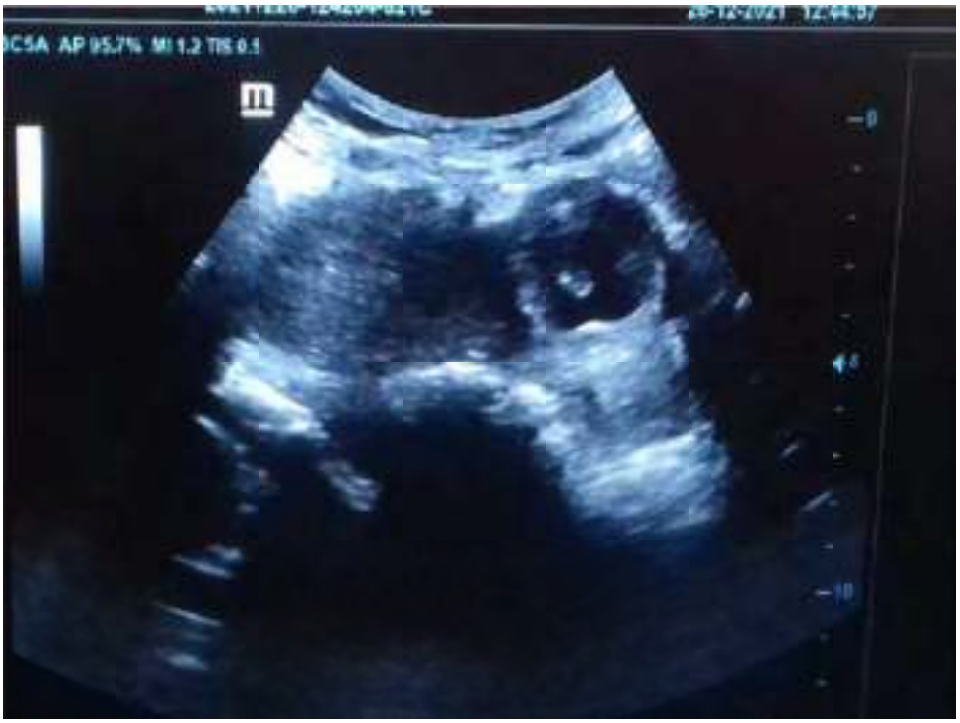


FIG C2 CERVICAL PREGNANCY

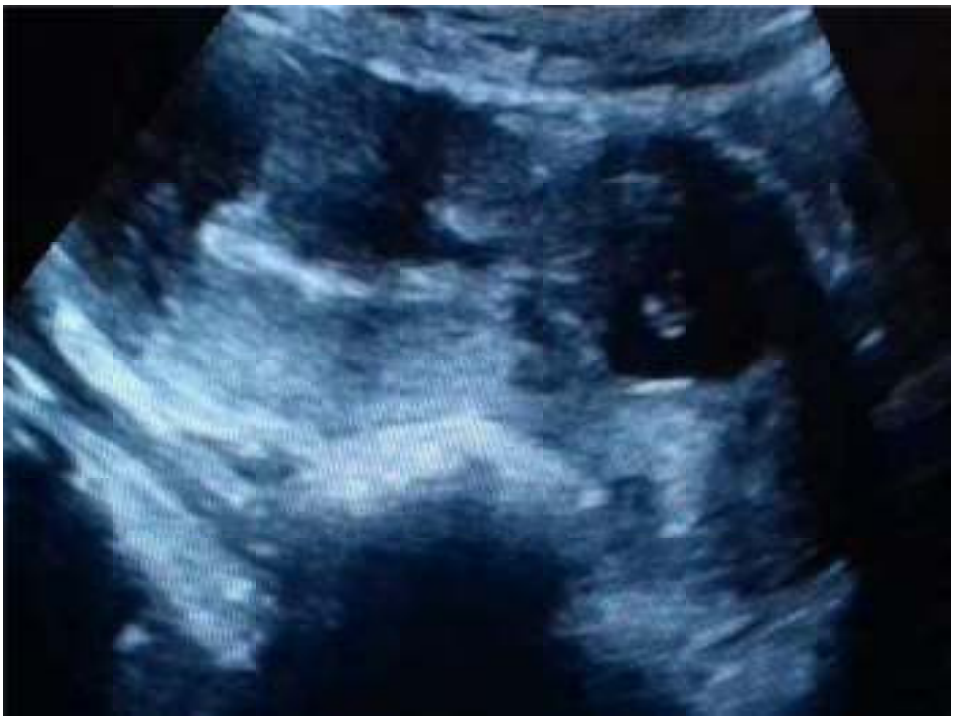


FIG C3 : USG WITH DOPPLER FLOW AS IN A CASE OF CERVICAL PREGNANCY

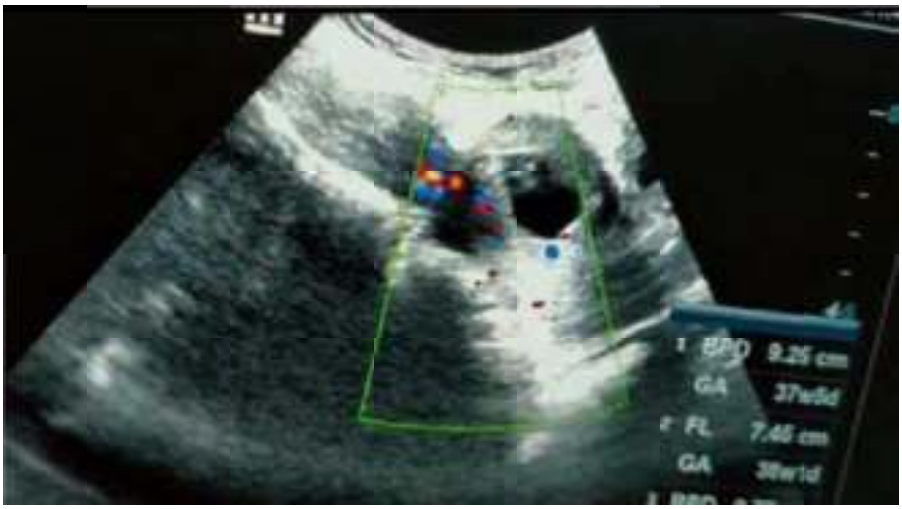


FIG 21 : UNRUPTURED TUBAL ECTOPIC PREGNANCY

CONFIRMING THE ULTRASOUND FINDINGS OF ADNEXAL MASS

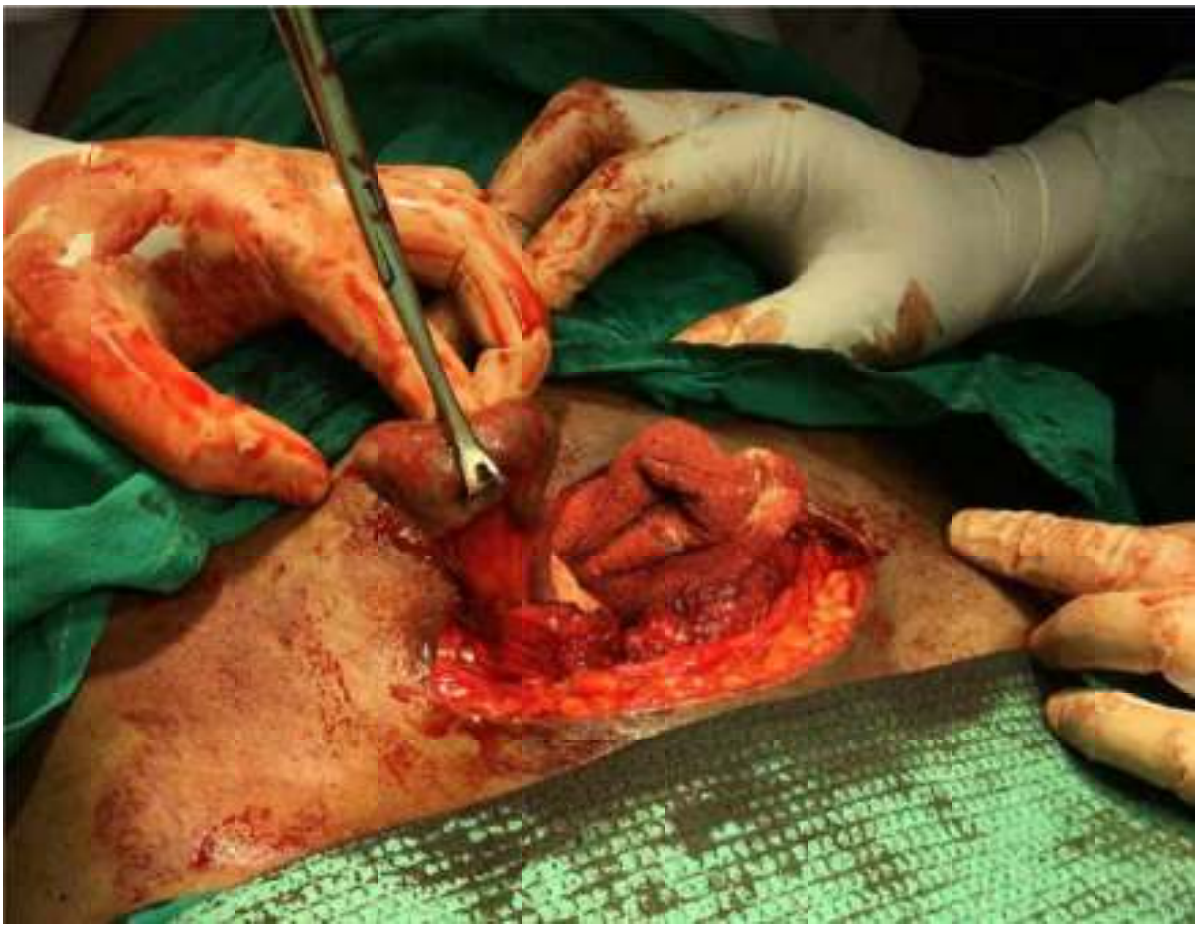


FIG 22 : RESECTED SPECIMEN OF UNRUPTURED TUBAL ECTOPIC. AMPULLA (THE COMMONEST SITE OF ECTOPIC IS RESECTED IN THIS)

FIG 23: UNRUPTURED TUBAL ECTOPIC PREGANANCY OF SIZE 4 * 5 * 4

WITH THE PRESENCE OF HEMOPERITONEUM

FIG 24 : RUPTURED ECTOPIC PREGNANCY WITH MASSIVE HEMOPERITONEUM

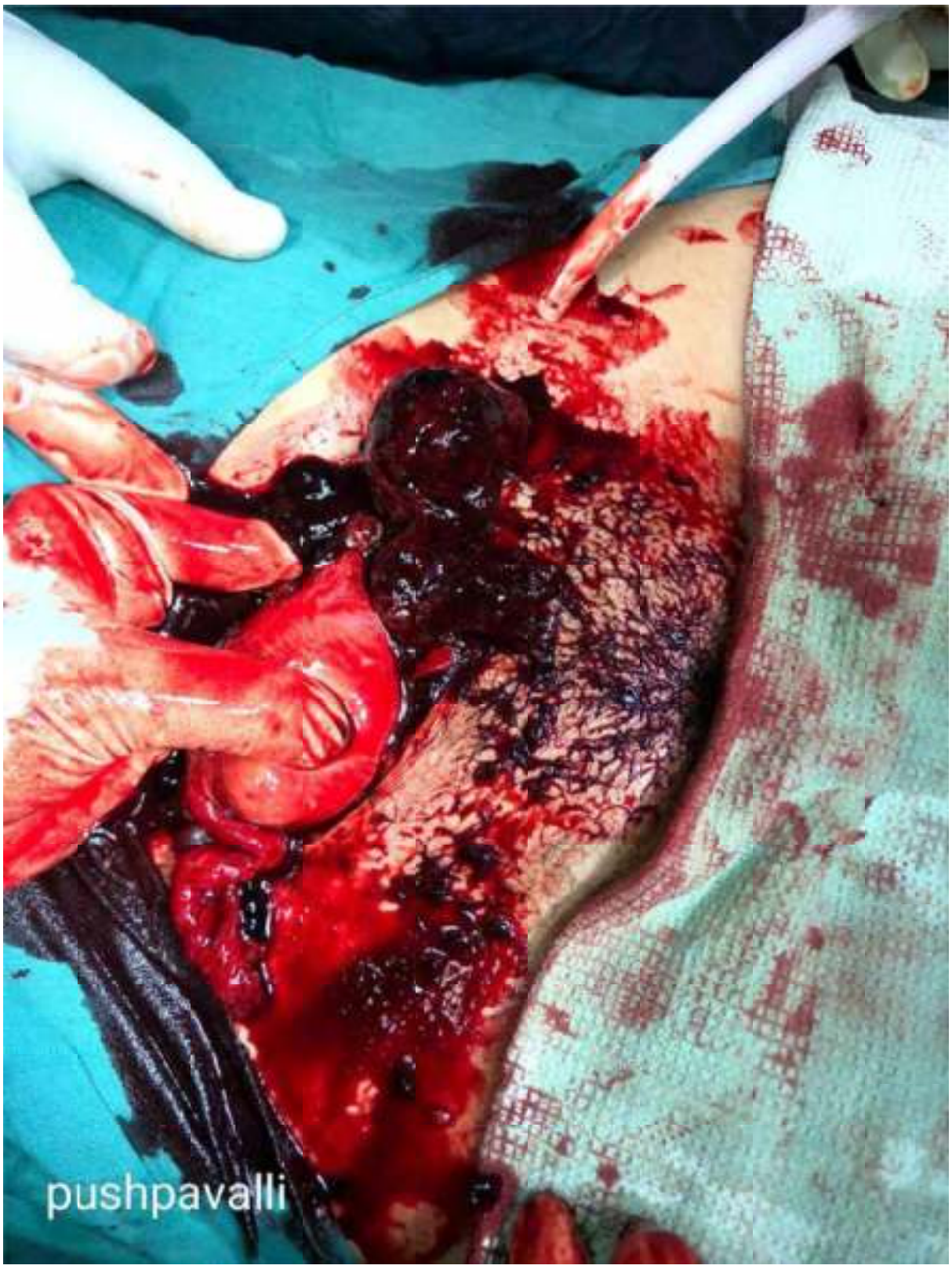


FIG 25 : CORNUAL SITE OF ECTOPIC PREGNANCY ASSOCIATED WITH RUPTURE

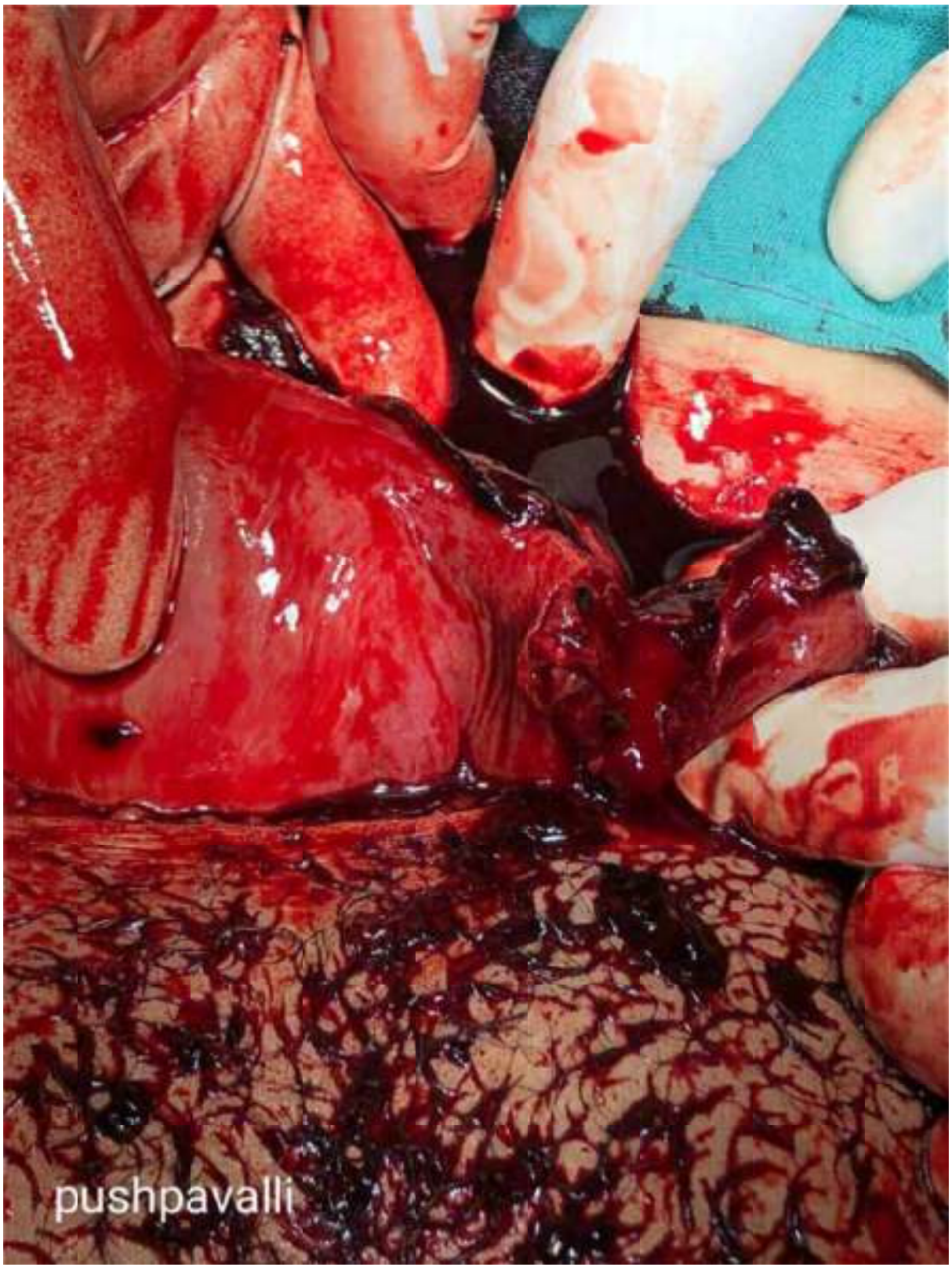


FIG 26 : RESECTED UNRUPTURED ECTOPIC SPECIMEN

(IMPLANTATION SITE CLOSE TO FIMBRIAL END)

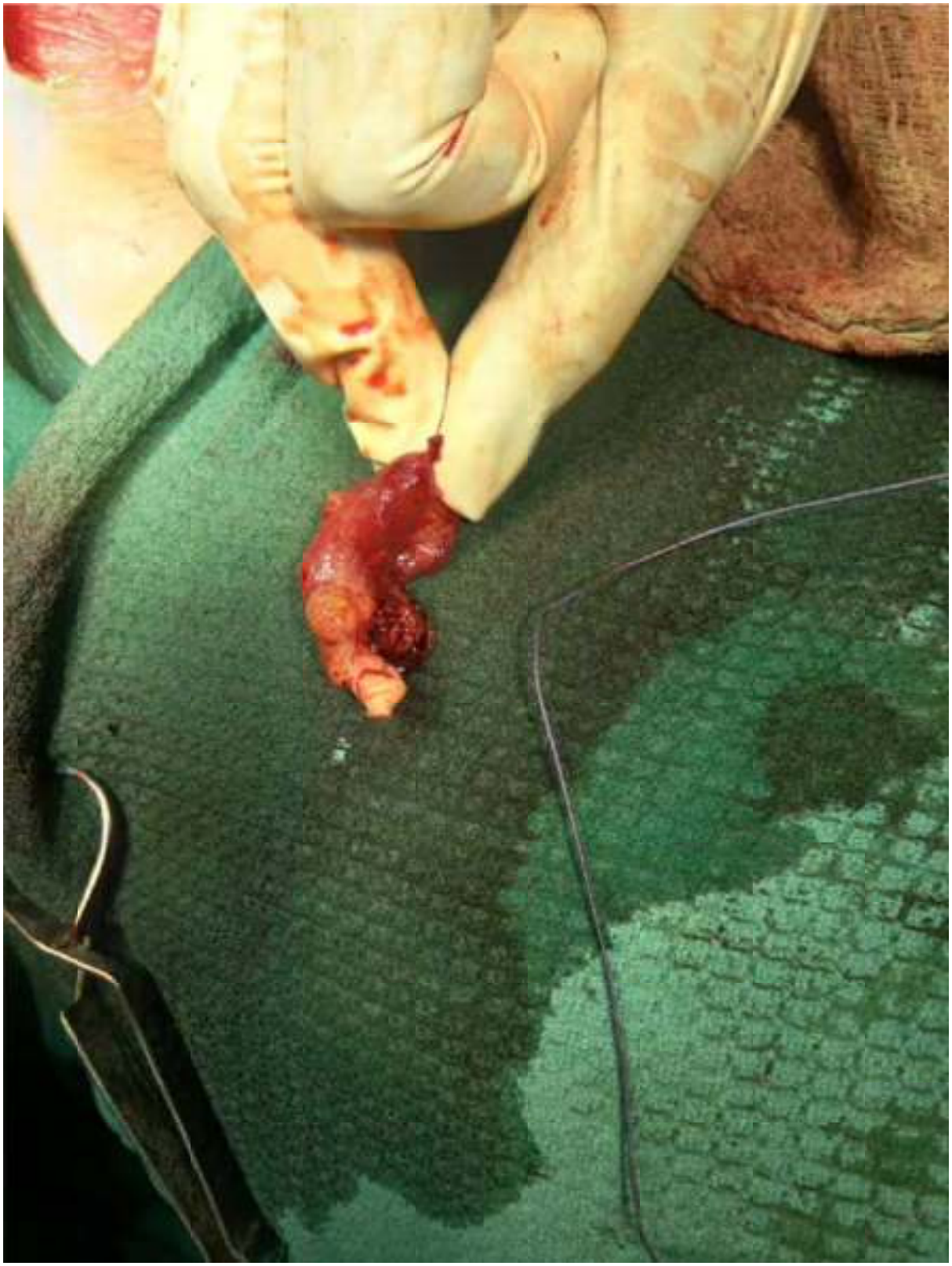


FIG 27 – CORNUAL PREGNANCY – UNRUPTURED WITH THE PRESENCE OF FETUS INSIDE THE SPECIMEN

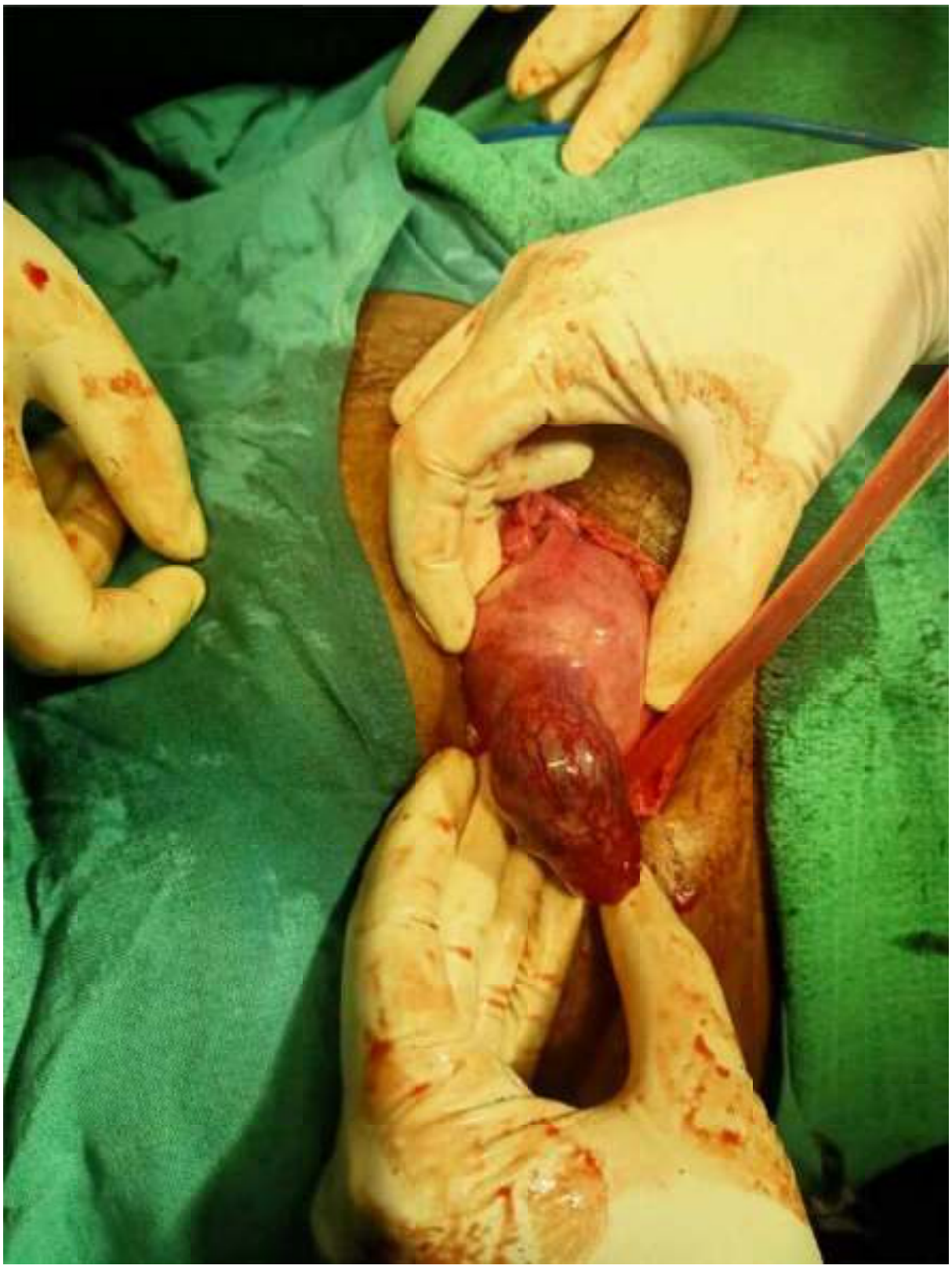


FIG 28 : UNRUPTURED ECTOPIC PREGNANCY

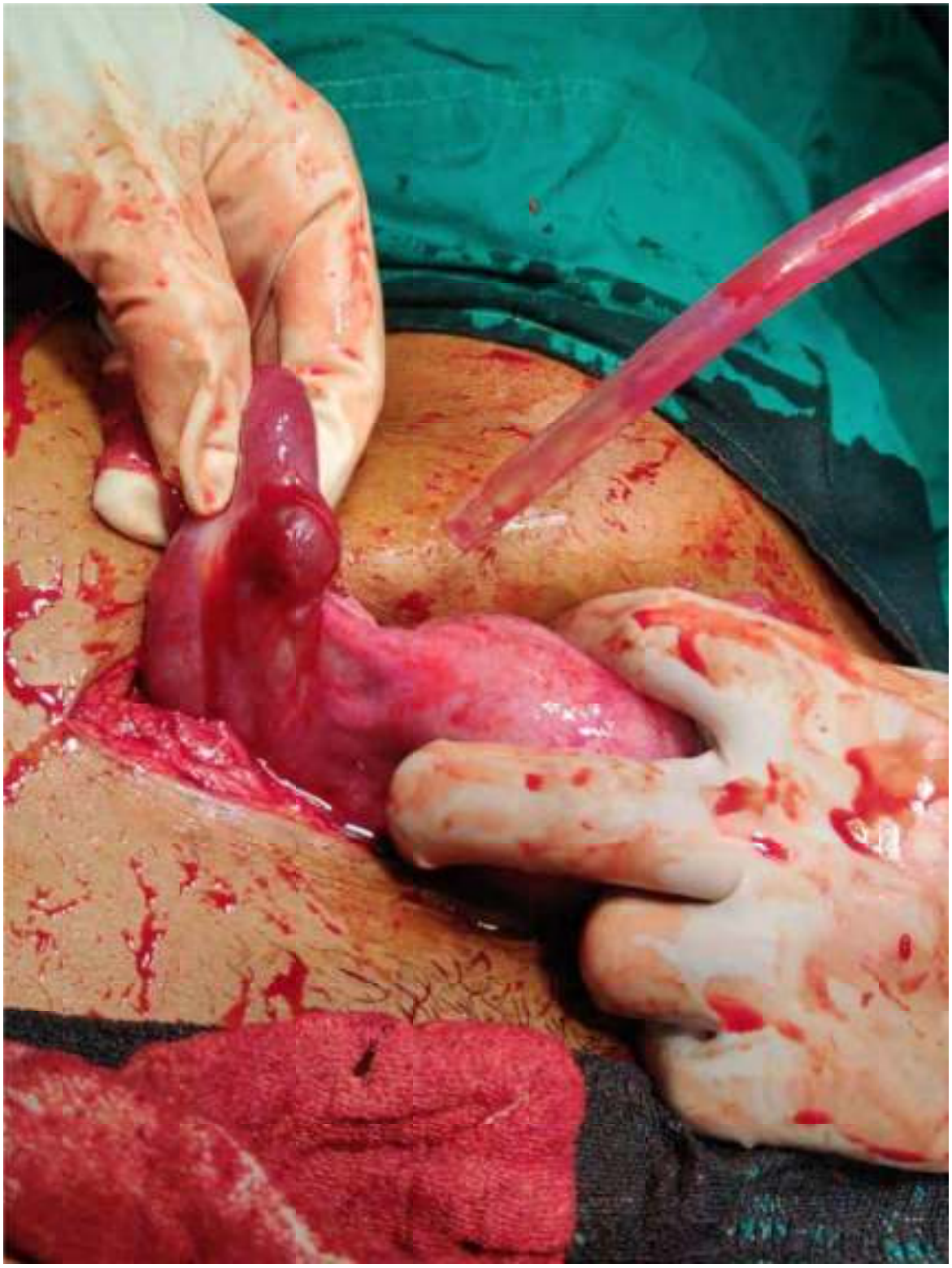


FIG 29 – PICTURE SHOWING FETUS WITH RUPTURED ECTOPIC PREGNANCY. THIS PATIENT HAD MASSIVE HEMOPERITONEUM

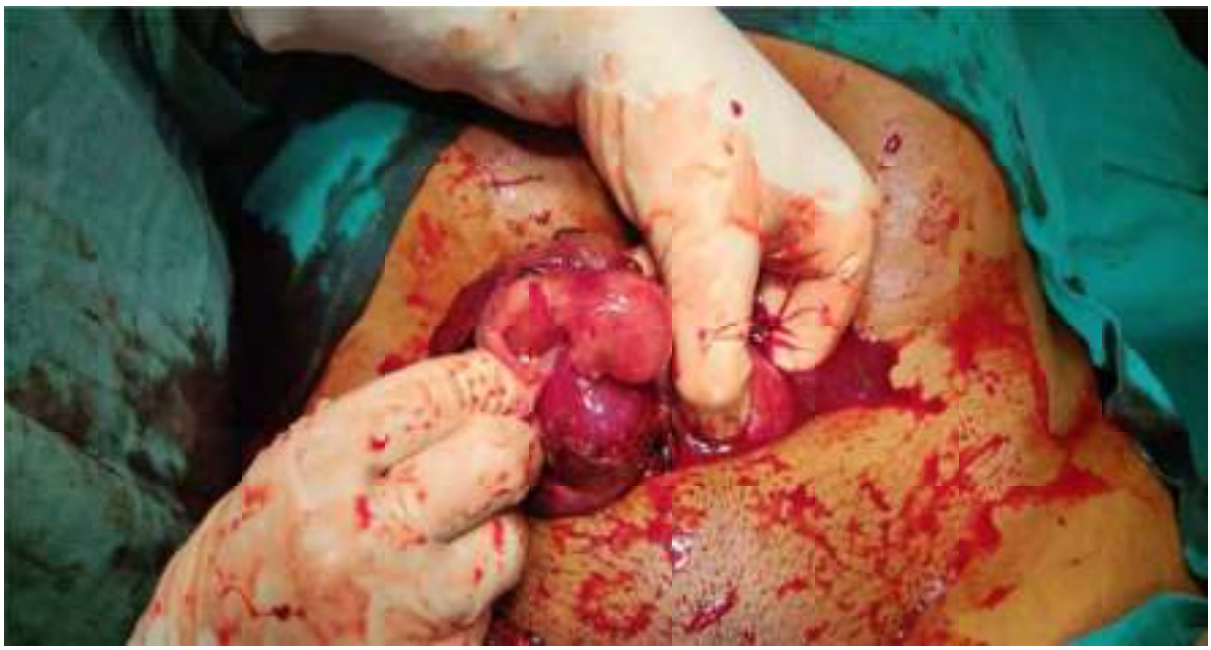


FIG 30 – DIAGNOSTIC LAPROSCOPY SHOWING EVIDENCE OF TUBAL ABORTION IN A PATIENT THE ORGANISED CLOTS WAS REMOVED

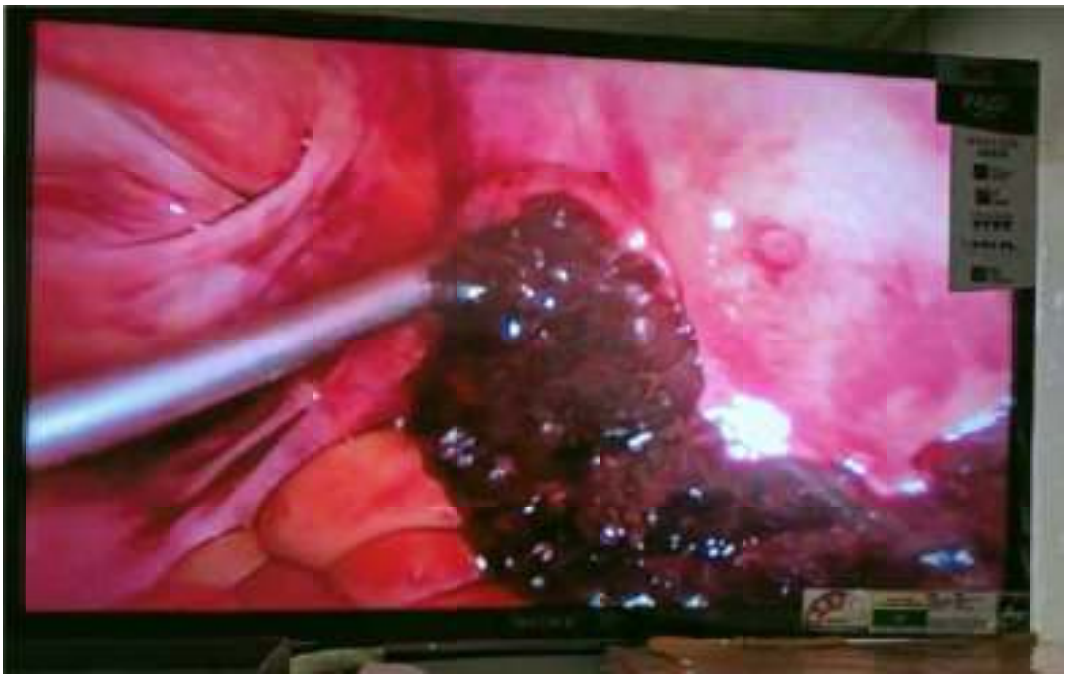


FIG 31 : CHRONIC ECTOPIC PREGNANCY SHOWING AN DISORGANISED MASS PRESENT AND THE SAME BEING REMOVED

FIG 32– A CASE OF OVARIAN PREGNANCY

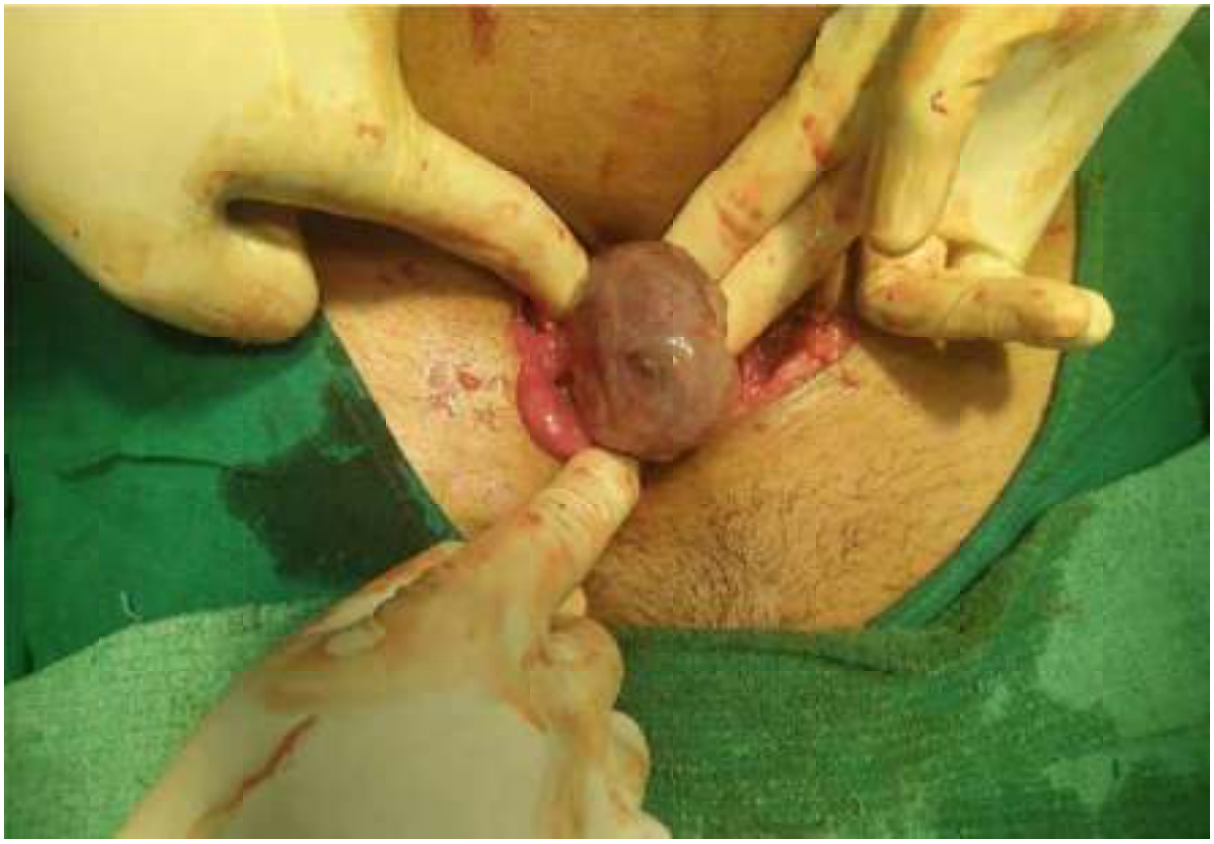


FIG 33 : A RESECTED SPECIMEN SHOWING FETUS WITH ORGANISED CLOTS SURROUNDING IT

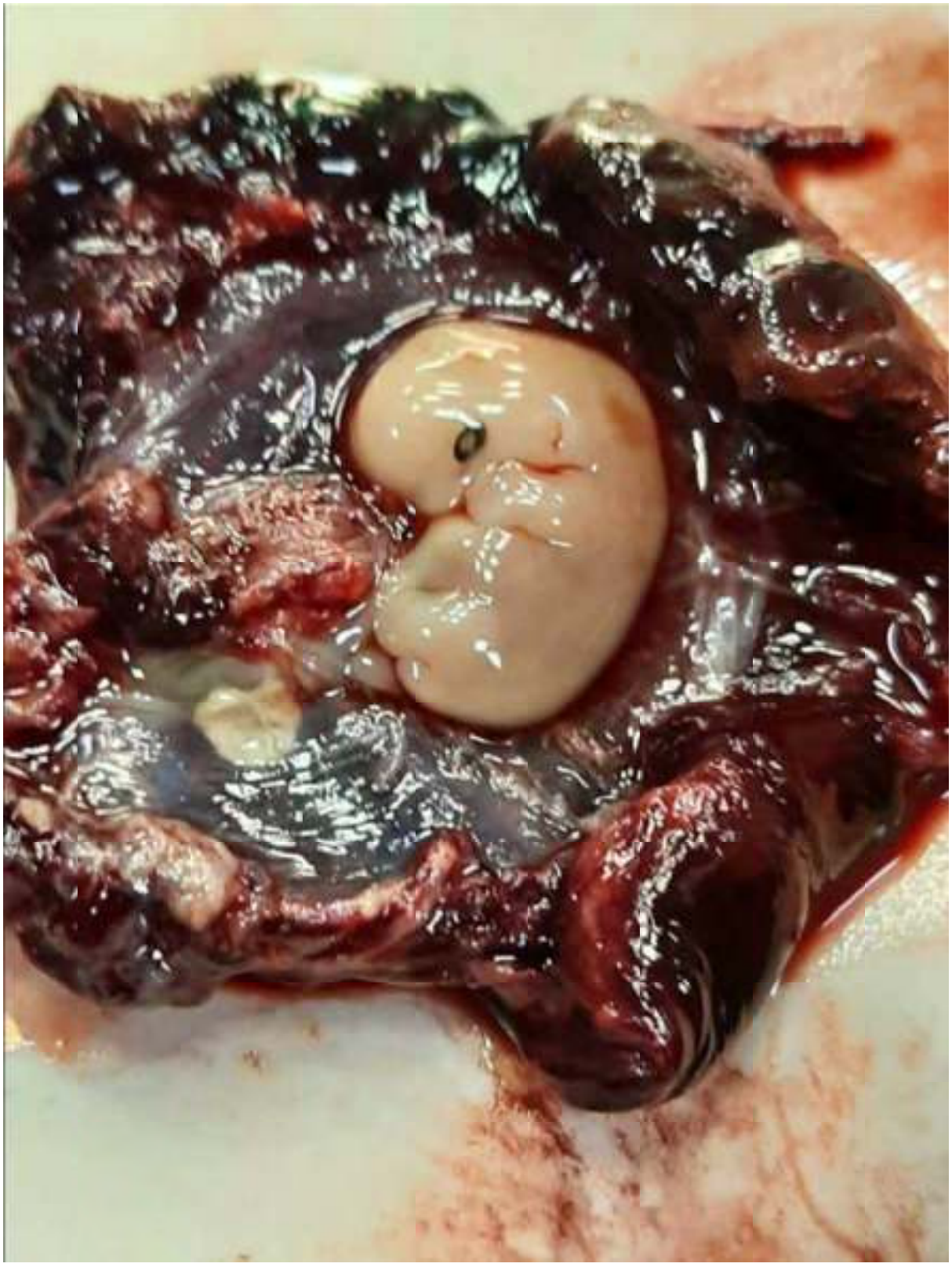


FIG 34: A CASE OF CAESAREAN SCAR ECTOPIC PREGNANCY WHERE ECTOPIC RESECTION WITH UTERINE WALL RENT REPAIR WAS DONE.

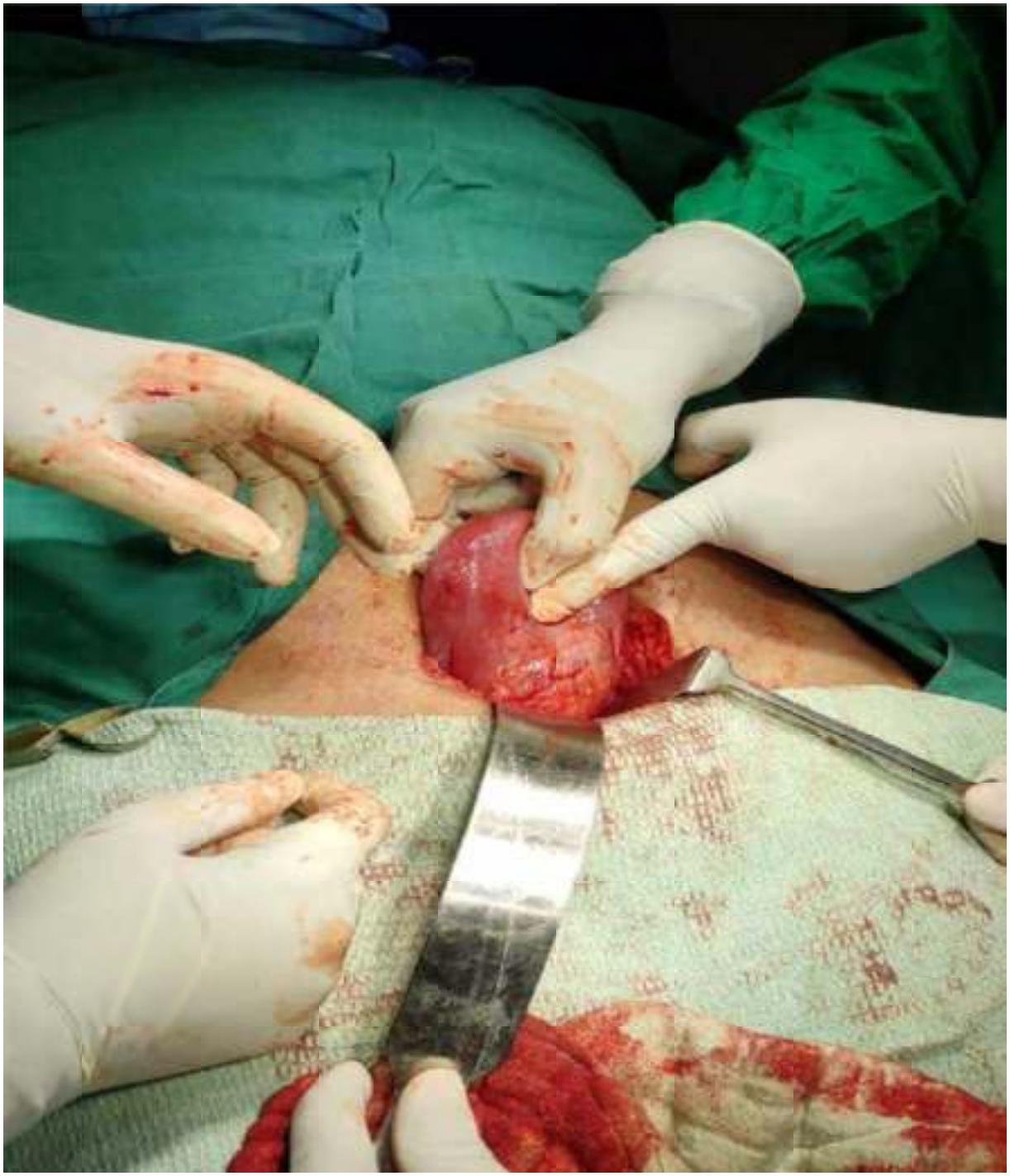


FIG 35: HISTOPATHOLOGY SLIDE SHOWING FALLOPIAN TUBE

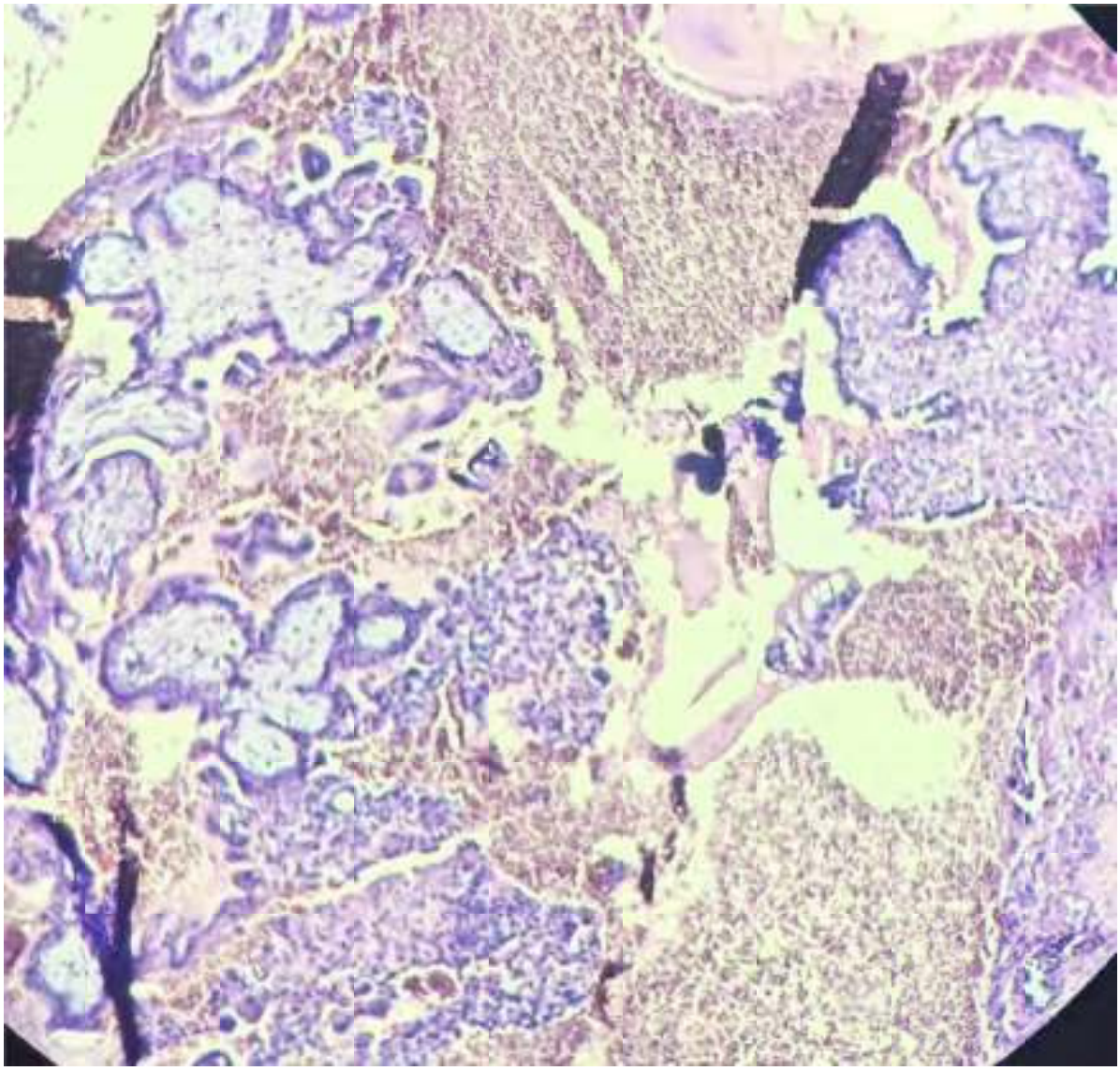


FIG 36 : HPE PICTURE SHOWING DECIDUAL VILLI ALONG WITH CUT SECTIONS OF FALLOPIAN TUBE

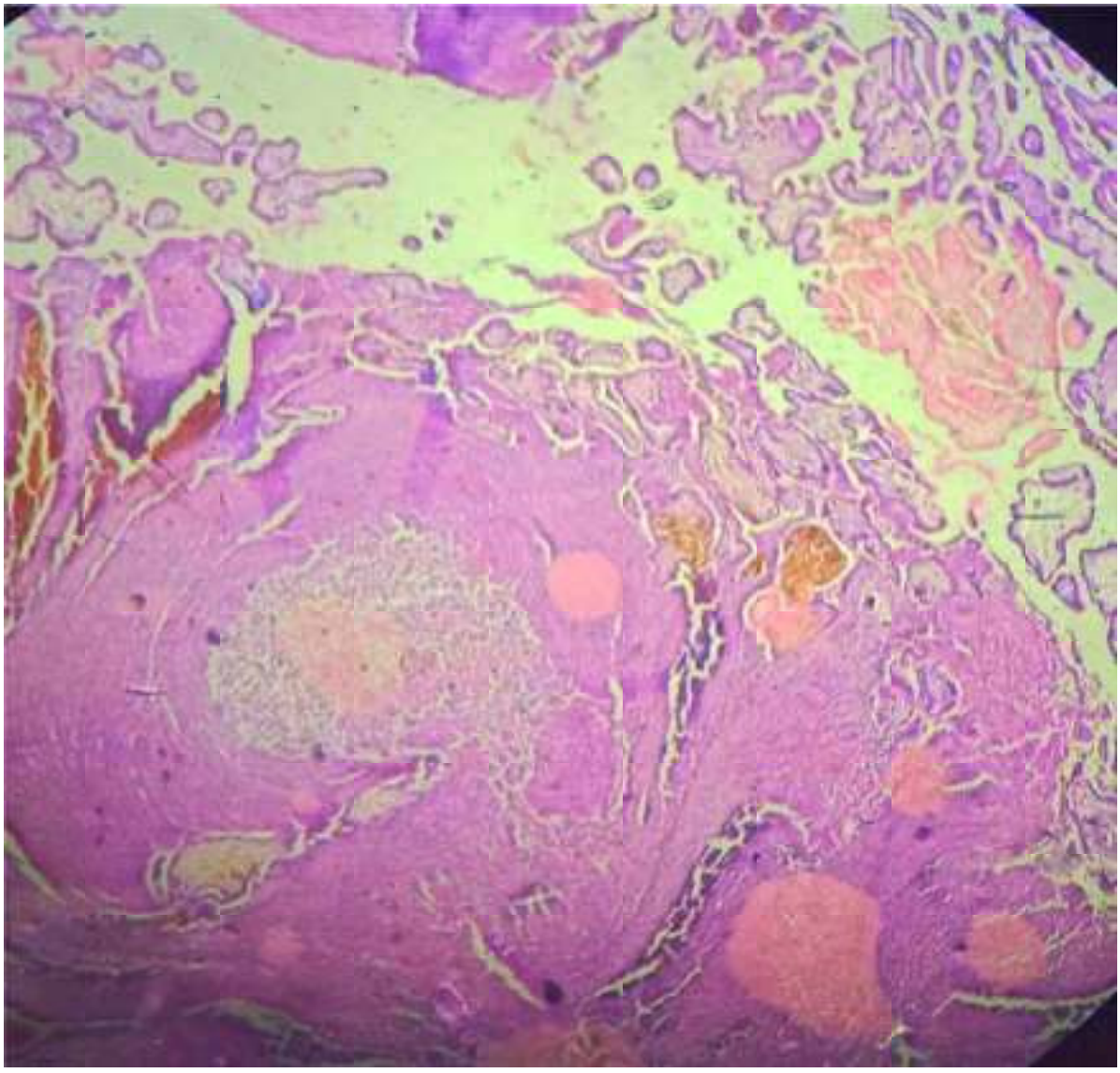


FIG 37 – HISTOPATHOLOGY PICTURE SHOWING FALLOPIAN TUBE AND CHORIONIC VILLI CONFIRMING THE DIAGNOSIS OF ECTOPIC PREGNANCY

DISCUSSION

In our study the incidence of ectopic pregnancy was 3.6 % per 1000 deliveries. In a study conducted by Shraddha Shetty K et. al in Mangalore , the incidence was 5.6/1000 deliveries.[25]

In our study 85.7 % of the population belonged to 21 – 30 yrs of age consistent with the results found in Smita singh et.al and Samiya Mufti et.al studies.[26] This is the age of peak sexual activity and reproduction.

More than 80 % of population were multigravida. Laxmi Karki et al results revealed 61 % multiparous women.[27]

12.9% women had irregular cycles. In a study done by Yan et al and Nan et al irregular cycles was associated in 10 % of population[28] consistent with our study results.

41.2 % of population presented with amenorrhea of 41 – 60 days. Similar results seen in Tang BD et.al and Panti A et.al.[29]

Urine pregnancy test was done in all patients of study population. The incidence of Ectopic Pregnancy with a negative UPT is 1.6% [30] In our case only 1 patient had negative urine pregnancy test.

About 56 % patients were anaemic with undue blood loss with Hb levels between 8 – 10.9 g%, where as 24% patients were severly anaemic with Hb levels between 5 – 7.9 g% associated with massive hemoperitoneum. The anemia at initial presentation is attributed to the blood loss which was clearly evident from the percentage of population that required transfusions (94.1%)

Among the risk factors evaluated the commonest are previous LSCS, tubal surgeries like sterilisation, previous h/o abortions, treatment undertaken for infertility, h/o oral contraceptive pill intake, tuberculosis, leucorrhea. 3 patients had MTP pill intake. With improvements in treatment for infertility the risk of ectopic pregnancy also increases. Evaluating the risk factors is the key role in a study done as it would enable the early detection of high risk groups and screen them prior to development of complications.

22.4 % of the study population presented with ectopic post tubal sterilisation. Among women who underwent sterilization before the age of 30 years the probability of ectopic pregnancy is increased.[31]

Among those sterilised most (79 %) of which were 2 – 5 years post sterilisation.

According to Mccousland et al electrocoagulation for female sterilisation causes more tubal pregnancies.

The various presenting symptoms were abdominal pain along with other symptoms. The classical triad of ectopic pregnancy was present only in 7 patients among the study population. Other gastrointestinal symptoms like nausea, vomiting , fever was also present along with their primary symptoms. In a study conducted in Mumbai abdominal tenderness was present in 59.69%, abdominal distension in 31.12%, forniceal tenderness in 71.43% and tender cervical movements in 69.89% and forniceal bogginess in 54%. Tachycardia and hypotension was seen in 52.55%.

13.7% patients had no abdominal signs[32]. In our study nearly 50 % patients presented without complaints of bleeding PV.

On clinical examination 73% patients were pale with 14.1 % in hypotension requiring adequate volume replacement. 28 % patients presented with tachycardia (pulse rate > 100 / mt). This indicates the percentage of study population which presented to the emergency department in unstable status. Timely management with blood and blood products have given 100 % good prognosis in all these patients.

In abdominal examination 42.4 % presented with diffuse tenderness and abdominal distension was presented in about 5 % of population. In per vaginal examination among the findings noted - forniceal tenderness (15 %) and cervical tenderness (15 %) were the commonest findings. 24 % presented with normal per vaginal examination findings which confirms that more recently, it has been reported that one third of women with ectopic pregnancy have no clinical signs and 9% have no symptoms.[32]

89.5% of patients presented with hemoperitoneum of less than 500ml. Pelvic hemorrhage is a more specific finding, with an 86%–93% positive predictive value when β-hCG levels are abnormal. 6% had hemoperitoneum > 500ml but less than 1000ml. 5% patients have massive hemoperitoneum of > 1000ml. 8.24% of patients have serum beta HCG with values between 1000 - 5000IU / ml. 2 patients had beta HCG values more than 5000IU/ml.

Levels of β-hCG continues to rise in early pregnancy and reaches a plateau at 9-11 weeks.

In a normal viable intrauterine pregnancy, it doubles every 48 hrs. If β-hCG levels increase by less than 50% during a 48-hour period, there is almost always a nonviable pregnancy associated, be it intra- or extrauterine[33].

However, up to 21% of ectopic pregnancies demonstrate a β-hCG doubling time identical to that of intrauterine pregnancies

Transvaginal US should be able to demonstrate a gestational sac when β-hCG levels are greater than 2000 mIU/mL, which is the discriminatory level of β-hCG

The actual expected rate of rise is dependent on initial hCG level; the expected rate of increase is 49 percent for an initial hCG level of <1500 mIU/mL, 40 percent for an initial hCG level of 1500 to 3000 mIU/mL, and 33 percent for an initial hCG level of >3000 mIU/mL. however hCG loses its significance in those patients presenting with impending rupture or ruptured ectopic with unstable vitals.

In our study as 68.2% presented with rupture, the number of cases for which β-hCG done at admission is less as resuscitation is emergency in those presenting with hemoperitoneum. Among those patients in our study who were evaluated with β-hCG, they were followed up with medical management. A decline in levels of β-hCG is seen which is consistent with successful outcome of medical management of ectopic pregnancy.

Ultrasonogram is a pioneer in diagnosing ectopic pregnancy as it detects the presence of even minimal amount of hemopritoneum. In our study usg findings were categorized into minimal (17.65%), moderate (44.71 %) and massive (5.88 %) amount of hemoperitoneum and the presence of adnexal mass (25.88%) and illdefined mass (14.12 %). With respect to blood transfusion caterosing the study population based on the units of blood and blood component received it was observed that nearly 24 patients required more than 5 units transfusion 5 patients required more than 10 unit of transfusion. With pearson correlation coefficient calculation of usg

findings of hemoperitoneum and transfusion details we have a strong correlation and R value = 0.948, with p value significant of p value < 0.00001. this suggests the anticipatory need of blood and blood products with USG findings and help to resuscitate the patients effectively and bring about good outcomes

68.23% of patients presented with ruptured ectopic, 21.1% have unruptured ectopic, 4% pregnancies resulted in tubal abortion, 2 were ovarian pregnancy and 1 was chronic ectopic pregnancy. The higher rate of rupture is due to referral from multiple districts as it is a tertiary care centre. 2 patients presented as caesarean scar pregnancy. It has an estimated incidence of ~1:1800-2200 pregnancies[34]. The overall incidence is however thought to be increasing, representing up to 6% of ectopic pregnancies in patients with a history of Cesarean section. In our study it was 2.3 % out of which one case was managed by suction evacuation and other by laparotomy and ectopic resection with uterine rent repair. Ovarian ectopic pregnancy incidence ranges from 1 in 2000 to 1 in 60 000 deliveries and accounts for 3% of all ectopic pregnancies[35]. We had 2 patients of ovarian ectopic pregnancy accounting for about 2.3%. Tubal abortion was present in about 4.7 % of study population. It is one of the fate of ongoing ectopic pregnancy where the products of conceptus are extruded from the fallopian tube via the fimbrial end. Right side of fallopian tube was more commonly affected (68 %) compared to left side (30 %). In the study by Nahar and Zabin et al the right side was more commonly affected compared to left side (54% and 79% respectively.)[36] In another study done by Saida Akter and Sharmi Sultana the incidence in right side (55.6%) is higher than the left (44.4 %) consistent with our study results.

In a study by Nahar, the sites of ectopic pregnancy were ampullary (50%), isthmic (20%), fimbrial (10%), rudimentary horn of bicornuate uterus (6%), interstitial (8%) and abdominal (2%) [36]

In a study by Bouyer *et al*., the sites of ectopic pregnancy were ampullary (70%), isthmic (12%), fimbrial (11%), ovarian (3%), interstitial (2%) and abdominal (1%)18. In a study by Siddiqua *et al*., the sites were ampullary (64%), isthmic (19%), fimbrial (12%), rudimentary horn of bicornuate uterus (2%) and cornual (0.67%)[37]

In our study the sites were ampulla (50.6 %), isthumic (20%) , fimbrial (9.4 %), interstitium (5.9%) and cornual (2.4 %).

Management in our study among 85 patients 4 patients were managed medically, methotrexate was given alternating with folinic acid. These patients satisfied with the criteria implied for medical management. They were followed with beta hCG levels and were treated successfully.

Unilateral partial salphingectomy (65.8%) done as a majority surgical procedure. In a study by Nahar, unilateral salpingectomy was done in 58% cases, by Zabin in 52% cases and by Siddiqua et al. in 71% cases. Total salphingectomy was done in 12.94 % patients. Suction evacuation was done for 1 case of caesarean scar pregnancy. Laparotomy was done in another case of caesarean scar ectopic pregnancy where caesarean scar ectopic excision with uterine wall closure. 2 cases of ovarian pregnancy was present for which one case ovarian cystectomy done and another one oopherectomy done. Fimbriectomy was done in 5 patients, as an isolated procedure and as combination with other surgical procedures. Diagnostic laparoscopy was done for 1 patient of chronic ectopic which showed features of tubal abortion and the

formed clots were removed. Urine pregnancy test was negative in this patient. Laparoscopy was mostly performed for tubal abortion (40%) and unruptured ectopic pregnancy (25%) whereas laparotomy mostly for ruptured ectopic pregnancy (70%) [38] Majority of management was partial salphingectomy which proves a life saving procedure as in emergency laparotomy.

Bilateral salphingectomy was done in 4.7% of cases; implied those cases of sterilisation failure. A case of chronic ectopic pregnancy was managed via laparotomy where partial salphingectomy with ovarian cystectomy was done. In this patient the tubal ectopic ruptured and formed an organised mass around the site of rupture with severe adhesions. Laparoscopy still remains low in number due to various reasons like lack of proper training in emergency procedures. The management therefore must be individualised based on the clinical presentation.

All the patients were followed with post operative histopathology and the evidence of ectopic tissue was confirmed.

Post operatively all the patients of study population had an excellent outcome and were discharged.

CONCLUSION

There is a world wide increase in the incidence of ectopic pregnancy in recent times affecting the predominant reproductive age group women.

Better diagnostic tools allow increase in early detection rates of ectopic pregnancies.

Changes in practices like the use of assisted conception techniques and usage of contraceptives has led to the increase in incidence of extra uterine implantation.

Increasing awareness of presence of pelvic infection with symptoms of leucorrhea and treating them early will reduce the incidence. Amenorrhea is not essential in diagnosis of ectopic pregnancy.

The classical triad of symptoms need not be always present and eagle eye suspicion of this diagnosis in early weeks of pregnancy is must needed

Ultrasound is the key stone in diagnosis of extrauterine implantation. Diagnosis is reached by a combination of clinical findings with ultrasound and biochemical (hCG).

Prediction of blood loss to plan for resuscitation of patients is equally important as the definitive management of patients. Correlation between USG prediction of blood loss and requirement of blood products is very strong and should be used as an effective tool.

Sterilisation status does not possibly rule out the possibility of ectopic. Hence it must be considered as a differential diagnosis with great suspicion.

Earlier presentation of the patient will widen the management options and reduces the risk of major intra peritoneal haemorrhage which is the most common cause of loss of hemodynamic unstability.

Ampulla – the site of fertilisation was the common site, right sided ectopic is more common than left side.

Trained staffs at field level to suspect ectopic pregnancy, availability of UPT Cards and USG machines will facilitate early identification in peripheries and avoid terminal end stage referral.

With effective management and timely correction we can achieve good prognosis and self satisfied outcome for all patients ans thus prevent morbidity and mortality

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ANNEXURES

DATA SHEET

PATIENT PROFILE

Name : Age : I.P.no :

Address :

Socio economic status :

Date and time of admission :

Mode of admission : Referral /Self

In case of referral the referral diagnosis :

Mode of transport :

Obstetric code :

LMP :

Period of amenorrhoea :

UPT : Positve/ Weakly positive/ Negative

Married since :

Duration of subfertility :

Past obstetric history :

 Miscarriage

 Normal vaginal delivery

 Caesarean section

 Previous ectopic gestation

 Gestational trophoblastic disease

Sterilisation status :

Sterilised / not sterilised

If sterilised , by what method

1) Concurrent sterilisation

2) Puerperal sterilisation

3) Laparoscopic sterilisation

4) TAT by open method

TIME SINCE STERILISATION :

OTHER CONTRACEPTIVE USE :

1) Barrier method

2) Intra uterine devices

3) Oral contraceptive pills

Combined pills / POP / Emergency contraceptive pills

4) Others

RISK FACTORS :

Previous LSCS

H/O abortion

H/O infertility

Ovulation induction

Artificial Reproductive techniques.

Previous ectopic pregnancy

Pelvic inflammatory diseases

Sterilisation

Tubal recanalisation surgery

Other pelvic surgeries

Intrauterine contraceptive device use

Combined oral contraceptive pills

Progesterone only pills

Emergency contraceptive pills

MTP pills

Smoking

Others

PRESENTING SYMPTOMS :

Abdominal pain

Amenorrhoea

Bleeding p/v

Vasovagal symptoms

Gastro intestinal symptoms

Shoulder tip pain

Others

EXAMINATION :

Puse rate

Pulse volume

Blood pressure

Temperature

Consciousness

Pallor

Tachycardia

PER ABDOMINAL FINDINGS

Abdominal distension

Abdominal tenderness

Guarding

PER VAGINAL EXAMINATION

Forniceal tenderness

Forniceal fullness

Adnexal mass

Others

CERVICAL EXCITATION TEST : positive / negative

CULDOCENTESIS : positive / negative / not done

INVESTIGATIONS

Haemoglobin

Renal function test

Liver function test

Blood grouping & typing

Serum beta hCG

ULTRASOUND : Transabdominal / Transvaginal / Both

ULTRASOUND FINDINGS :

Empty uterus

Free fluid

Adnexal mass with size

Extra uterine gestational sac with size

Embryonic cardiac activity

Other findings

OTHER IMAGINGS : Doppler scan /CT/ MRI / not done

CT/ MRI /Doppler findings , if taken :

CLINICAL DIAGNOSIS :

TIME INTERVAL BETWEEN ADMISSION AND ONSET OF

DEFINITIVE TREATMENT :

TIME DELAY : yes / no

REASONS FOR TIME DELAY

1) Late diagnosis

2) Waiting for beta hCG / CT/MRI reports

3) Admissions in other wards

4) Doubtful diagnosis

5) others

MANAGEMENT : Medical / Surgical

MEDICAL MANAGEMENT : Single dose MTX / Multiple dose MTX

SURGICAL MANAGEMENT : Laparotomy / Laparoscopic

Date and time of surgery :

Type of surgery :

1) Partial salphingectomy – unilateral / bilateral

2) Total salphingectomy – unilateral / bilateral

3) Salphingo oophorectomy

4) Salphingostomy

5) Hysterectomy

6) Cornual wedge resection

7) Others

Per operative findings :

1) Rupured / unruptured / chronic rupture / tubal abortion

2) Side

3) Site

4) Amount of haemoperitoneum

5) Other findings

Adhesions

Corpus luteal cyst – same side / opposite side

Ovarian cyst

Uterine anomalies

Endometriosis

Tubal pathology

Other findings

Duration of surgery :

Complications during surgery :

NUMBER OF UNITS OF BLOOD AND BLOOD PRODUCTS

TRANSFUSED :

ICU CARE (In days) :

VENTILATORY SUPPORT REQUIRED / NOT

FEVER : Present / Absent

DURATION OF HOSPITAL STAY (IN DAYS):

HPE REPORT :

FINAL DIAGNOSIS :

MASTER CHART

A CLINICAL STUDY OF PRESENTATION AND MANAGEMENT OF ECTOPIC PREGNANCY AND ITS OUTCOMES

S.No.	Name	Age	Date	parity	presenting features	marital st	risk factors	h/o similar	medical/surgical dis. all/ves	LMP	EXAMINATION findings	hemodynamic stability	abdominal examination	vaginal examination	hemoglobin	written consent taken	USG	fluid seen	BLOOD TRANSFUSED	INTRA OP	outcome
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	No	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Yes	[illegible]	[illegible]	Yes	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Yes	[illegible]	[illegible]	Yes	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Yes	[illegible]	[illegible]	Yes	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	No	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Yes	[illegible]	[illegible]	Yes	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Yes	[illegible]	[illegible]	Yes	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Yes	[illegible]	[illegible]	Yes	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Yes	[illegible]	[illegible]	Yes	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Yes	[illegible]	[illegible]	Yes	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Yes	[illegible]	[illegible]	Yes	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Yes	[illegible]	[illegible]	Yes	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Yes	[illegible]	[illegible]	Yes	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Yes	[illegible]	[illegible]	Yes	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Yes	[illegible]	[illegible]	Yes	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Yes	[illegible]	[illegible]	Yes	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Yes	[illegible]	[illegible]	Yes	[illegible]	[illegible]

S.No.	Name	Age/Sex	UHID	Facility	Presenting features	Onset to ER	Vitals on admission	SpO2 on admission	Neurological grade at admission	LKAP	CT scan findings	Hemorrhage site on CT	Associated abnormalities on CT	Surgical intervention	Hemoglobin	Urine pregnancy test	CSF	DSA findings	Surgical intervention	Outcome
1	[illegible]	37	[illegible]	[illegible]	[illegible]	4 hours	[illegible]	[illegible]	[illegible]	[illegible]	Normal	Right	[illegible]	[illegible]	8.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	29	[illegible]	[illegible]	[illegible]	2 hours	[illegible]	[illegible]	Grade III	[illegible]	Normal	[illegible]	[illegible]	[illegible]	9.8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	41	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
33	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
34	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
35	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
36	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
37	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

S.No.	Name	GDH	BED	Ward	Chief Complaint/Presenting Complaint	Time of Call/Arrival	Ambulance Number	Driver Name/Contact	Time of Dispatch/Departure	Time of Arrival	Patient Condition/Triage	Time of Handover	Hospital Name/Destination	Outcome/Disposition	Remarks/Notes
1	[illegible]	ED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	ED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	ED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	ED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	ED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	ED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	ED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	ED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	ED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	ED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	ED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	ED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	ED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	ED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	ED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	ED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	ED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	ED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	ED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	ED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Addr.	name	age	room	party	presenting features	marital life	risk factors	hydration status	peripheral pulses and color	LMP	last menstrual period	pulse oximetry	abortion x-ray	vaginal examination	hemoglobin	urine pregnancy test	ENT	DIAGNOSIS	BLOOD TEMPERATURE	EXTRA OF	volunteer
17	[illegible]	32	220	[illegible]	Bleeding pr, pain abdomen, nausea, vomit, fever	5 yrs	hep pil [illegible] [illegible] [illegible] [illegible]	no	Regil 150	[illegible]	Pelv	[illegible]	[illegible]	[illegible]	9.1	neg	Nasal exam: mucosa [illegible] clear, nares bilat, no rhinorrhea, no nasal lesions	Nasal exam: right inferior turbinate hypertrophy	Yes	Vagin examination c [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]	pend, subm [illegible]
18	[illegible]	27	2 [illegible]	[illegible]	[illegible] [illegible] [illegible]	6 m	[illegible] [illegible]	sl	Reg [illegible]	[illegible]	Pelv	Normal	[illegible]	[illegible]	9.0	neg	[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]	right [illegible] [illegible] [illegible]	Yes [illegible]	[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]	[illegible]
19	[illegible]	35	[illegible]	[illegible] [illegible] [illegible]	[illegible] [illegible] [illegible] [illegible]	1 yrs	sl	No	Regul 150	[illegible] [illegible]	Pelv	Normal	[illegible] [illegible] [illegible]	[illegible] [illegible] [illegible]	9.0	neg	[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]	right side tubal ectopic preg w/ [illegible] moderate free fluid	R. adnexal mass	Yes	[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

Case	Name	Age	Sex	Parity	Presenting features	Duration	Mechanism	Hydramnios	Intrauterine death	Lie	Cervix	Fetal heart rate	Abdominal inspection	Vaginal examination	Haemoglobin	Urine albumin	ANC	Diagnosis	Blood transfusion	Antenatal	Outcome
1	[illegible]	28	[illegible]	[illegible]	Persistent severe headache	12 hrs	Primiparous	nil	[illegible]	[illegible]	Not effaced	136bpm, regular	Right fundal height, head palpable per abdomen	Head at pelvic inlet, cervix 3cm dilated	9.8	+++	Booked at 24 weeks, regular ANC	Right marginal placenta previa	Yes	Right partial placenta previa with [illegible]	[illegible]
2	[illegible]	26	[illegible]	[illegible]	Persistent vaginal bleeding	3 hrs	Multiparous	nil	[illegible]	[illegible]	Not effaced	142bpm, regular	Fundal height 32cm, head palpable	Head at pelvic inlet, cervix 2cm dilated	10.2	++	Booked at 28 weeks, regular ANC	Right marginal placenta previa	Yes	Right partial placenta previa with [illegible]	[illegible]
3	[illegible]	30	[illegible]	[illegible]	Persistent severe headache	6 hrs	Primiparous	nil	[illegible]	[illegible]	Not effaced	138bpm, regular	Fundal height 30cm, head palpable	Head at pelvic inlet, cervix 1cm dilated	11.0	++	Booked at 32 weeks, regular ANC	Right marginal placenta previa	Yes	Right partial placenta previa with [illegible]	[illegible]
4	[illegible]	32	[illegible]	[illegible]	Persistent severe headache	8 hrs	Primiparous	nil	[illegible]	[illegible]	Not effaced	140bpm, regular	Fundal height 31cm, head palpable	Head at pelvic inlet, cervix 2cm dilated	10.5	++	Booked at 30 weeks, regular ANC	Right marginal placenta previa	Yes	Right partial placenta previa with [illegible]	[illegible]
5	[illegible]	24	[illegible]	[illegible]	Persistent severe headache	5 hrs	Primiparous	nil	[illegible]	[illegible]	Not effaced	144bpm, regular	Fundal height 29cm, head palpable	Head at pelvic inlet, cervix 1cm dilated	10.8	++	Booked at 26 weeks, regular ANC	Right marginal placenta previa	Yes	Right partial placenta previa with [illegible]	[illegible]
6	[illegible]	29	[illegible]	[illegible]	Persistent severe headache	7 hrs	Primiparous	nil	[illegible]	[illegible]	Not effaced	140bpm, regular	Fundal height 30cm, head palpable	Head at pelvic inlet, cervix 2cm dilated	10.1	++	Booked at 28 weeks, regular ANC	Right marginal placenta previa	Yes	Right partial placenta previa with [illegible]	[illegible]

KEY TO MASTERCHART

D.O.A	-	Date of admission
I.P.NO	-	In patient number
LMP	-	Last menstrual period
NK	-	Not known
ND	-	Not done
UPT	-	Urine pregnancy test
P	-	Positive
N	-	Negative
WP	-	Weakly positive
Y	-	Year
m	-	month
hr	-	hour
min	-	minute
S	-	Sterilised
NS	-	Not Sterilised
A	-	Applicable
NA	-	Not applicable
F	-	Feeble
PR	-	Present
AB	-	Absent
Rt	-	Right
Lt	-	Left

R	-	Ruptured
UR	-	Unruptured
ST	-	Sterilisation
LS	-	Laparoscopic sterilisation
PS	-	Puerperal sterilisation
TAT	-	Total abdominal tubectomy
Con	-	Concurrent sterilisation
IUCD	-	Intrauterine contraceptive device
EC	-	Emergency contraception
COC	-	Combined oral contraceptive
POP	-	Progesterone only contraceptive
B	-	Barrier method
LAM	-	Lactational amenorrhoea
MTP	-	Medical termination of pregnancy
PID	-	Pelvic inflammatory disease
ART	-	Artificial reproductive technique
Sx	-	Surgery
LSCS	-	Lower segment caesarean section
AM	-	Amenorrhoea
LAP	-	Lower abdominal pain
BPV	-	Bleeding per vaginum
D	-	Abdominal Distension
T	-	Abdominal tenderness

FF	-	Forniceal fullness
FT	-	Forniceal tenderness
A.mass	-	Adnexal mass
EU	-	Empty uterus
FL	-	Free fluid
G.sac	-	Gestational sac
Bicorn.ut	-	Bicornuate uterus
FP	-	Fetal pole
FH	-	Fetal heart
RSO	-	Right salphingo oophorectomy
LSO	-	Left salphingo oophorectomy
hCG	-	human chorionic gonadotropin
Infundib	-	Infundibulum
WB	-	Whole blood
PCV	-	Packed cell volume
PLTS	-	Platelets
FFP	-	Fresh frozen plasma
V	-	Ventilatory support

PATIENT CONSENT FORM

STUDY TITLE:

A CLINICAL STUDY OF PRESENTATON AND MANAGEMENT OF ECTOPIC PREGNANCY AND ITS OUTCOMES

DEPARTMENT OF OBSTETRICS & GYNAECOLOGY,
GMKMCH SALEM

PARTICIPANT NAME: AGE: SEX:

I.P. NO:

I confirm that I have understood the purpose of the above study. I have the opportunity to ask the question and all my questions and doubts have been answered to my satisfaction.

I have been explained about the possible complications that may occur during and after medical procedure. I understand that my participation in the study is voluntary and that I am free to withdraw at any time without giving any reason.

I understand that investigator, regulatory authorities and the ethics committee will not need my permission to look at my health records both in respect to the current study and any further research that may be conducted in relation to it, even if I withdraw from the study. I understand that my identity will not be revealed in any information released to third parties or published, unless as required under the law. I agree not to restrict the use of any data or results that arise from the study.

I hereby consent to participate in this study.

Time: Patient name;

Date: Signature / Thumb Impression of Patient:

Place

Name and signature of the Investigator

ஒப்புதல் படிவம்

STUDY: A CLINICAL STUDY OF PRESENTATON AND MANAGEMENT OF ECTOPIC PREGNANCY AND ITS OUTCOMES

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பெயர் வயது எண்

மேற்கண்ட ஆய்வின் நோக்கத்தை நான் புரிந்து கொண்டேன் என்பதை உறுதிப்படுத்துகிறேன். கேள்வி கேட்க எனக்கு வாய்ப்பு உள்ளது, எனது எல்லா கேள்விகளுக்கும் சந்தேகங்களுக்கும் எனது திருப்திக்கு பதில் அளிக்கப்பட்டுள்ளது.

ஆய்வில் எனது பங்கேற்பு தன்னார்வமானது என்பதையும், எந்த காரணமும் தெரிவிக்காமல் எந்த நேரத்திலும் திரும்பப் பெற எனக்கு சுதந்திரம் இருப்பதையும் நான் புரிந்துகொள்கிறேன்.

நான் ஆய்வில் இருந்து விலகினாலும், தற்போதைய ஆய்வு மற்றும் அது தொடர்பாக மேற்கொள்ளப்படக்கூடிய எந்தவொரு ஆராய்ச்சியையும் பொறுத்தவரை எனது சுகாதார பதிவுகளைப் பார்க்க புலனாய்வாளர், ஒழுங்குமுறை அதிகாரிகள் மற்றும் நெறிமுறைக் குழுவுக்கு எனது அனுமதி தேவையில்லை என்பதை நான் புரிந்துகொள்கிறேன். மூன்றாம் தரப்பினருக்கு வெளியிடப்பட்ட அல்லது வெளியிடப்பட்ட எந்தவொரு தகவலிலும் எனது அடையாளம் வெளிப்படுத்தப்படாது என்பதை நான் புரிந்துகொள்கிறேன், சட்டத்தின் கீழ் தேவைப்பட்டால் தவிர. ஆய்வில் இருந்து எழும் எந்தவொரு தரவு அல்லது முடிவுகளின் பயன்பாட்டை கட்டுப்படுத்த வேண்டாம் என்று நான் ஒப்புக்கொள்கிறேன்.

இந்த ஆய்வில் பங்கேற்க நான் இதன்மூலம் ஒப்புக்கொள்கிறேன்

இடம்: நோயாளியின் பெயர்

தேதி:

நோயாளியின் கையொப்பம்