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NEWS LETTER

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KJK HOSPITAL

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CONTENTS

From the Editors Desk.....

The newsletter this time coincides with the16th Annual workshop of KJK Hospital, which this year is on PCOS.

Since its description in 1935 by Stein and Leventhal, much has been learned about the pathophysiology of PCOS from its neuroendocrine underpinnings to an ever-growing understanding of the link between obesity, insulin resistance (IR) and PCOS. Based on this current understanding of PCOS, it is important that the patient and medical provider approach management not only towards improving the often troublesome hirsutism and infertility but also towards the long-term risks associated with IR. In contrast, because of the long-term health implications of IR, the importance of lifestyle modification toward weight management and maintaining adequate physical activity should be the one constant in the management of these patients.

Despite the high prevalence of PCOS, the diagnosis and differential diagnosis remains confusing. Once the diagnosis is made, the management options can seem daunting at first Generally there are but four issues which arise in the management of PCOS patients: regulation of menses, control of hirsutism, fertility issues, and the management of the IR syndrome. This workshop aims to not only clarify the diagnosis of PCOS and the management of its manifestations, but also to stress the importance of taking a life-long approach to the management of the IR syndrome.

Having said that about PCOS you can now turn the pages of this newsletter to glance through the interesting case reports within.

Happy reading....

Dr K Jayakrishnan

THE RESIDUAL OVARY

Dr Niranjana Jayakrishnan

HISTORY

45 year old lady, status post total abdominal hysterectomy 6 years back elsewhere, presented to our out patient department with complaints of lower abdominal pain since 6 weeks. She did not have any details of the hysterectomy done. She was told that both her ovaries were retained, by her then operating surgeon.

On ultrasound, she was diagnosed to have a large right adnexal mass.

Right tube was enlarged into a hydrosalpinx of 4cm. Right ovary contained a cyst with internal echos, 6cm in size. Tube was adherent to the ovarian surface. The possibility of a tuboovarian mass was not ruled out.

MRI pelvis revealed that the right ureter was coursing through the lateral wall of the mass. Rectosigmoid was adherent to posterior surface of the mass. MRI was suggestive of a tubo ovarian mass.

An operative laparoscopy (adnexectomy) was planned for her.

LAPAROSCOPY

At laparoscopy, there was a large tubo ovarian mass of 6-7cm. Rectosigmoid was densely adherent to the posterior surface of the mass. The course of the ureter was traced from the pelvic brim along the lateral pelvic wall. The ureter was seen coursing along the right lateral wall of the mass. Pouch of douglas was completely obliterated by bowel adhesions.

Bowel adhesions were released carefully by sharp and blunt dissection laparoscopically, using scissors. Lateral peritoneum was dissected from the pelvic brim up till the lateral pelvic wall and ureter was displaced laterally. Right laparoscopic adnexectomy was done using Ligasure. Tubo ovarian mass was retrieved through in bag morcellation using a 10mm lateral port and sent for histo pathology.

Bowel integrity was confirmed at the end of the procedure using gas insufflation method. Ureteric peristalsis was seen at the end of the procedure.

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DISCUSSION

The incidence of Residual Ovary Syndrome (ROS) was 2.85%. While chronic pelvic pain was the principle indication for subsequent reexploration, an asymptomatic pelvic mass noted during routine follow-up examination accounted for 24.6% of operations for ROS. The majority of patients underwent surgery during the first 10 years, while the highest incidence occurred within the first 5 years .

Since ROS was found to occur in 1/35 women who had undergone previous hysterectomies mainly due to physiologic ovarian function and benign cyst formation, but not malignancy, routine oophorectomy is justified in premenopausal women over 45 years of age.

However, the final decision to perform elective oophorectomy at the time of hysterectomy for benign disease should be established on an individual basis, taking into consideration age, individual and family risk factors, the patient's preference and ability to ensure long-term compliance to exogenous hormone replacement therapy

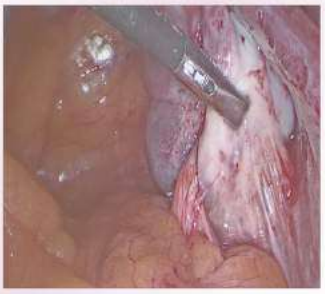


Figure 1:
Right tubo ovarian mass

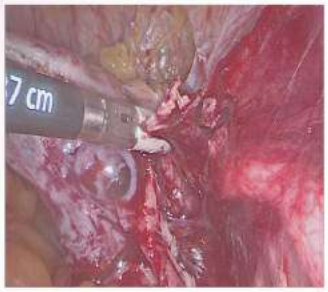


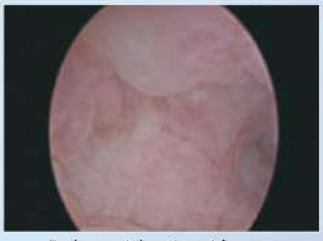
Figure 2: Right adnexectomy done. Ureter seen along right pelvic side wall

DISAPPEARING FIBROID

Dr Surbhi Gupta

CLINICAL HISTORY- A 30 yr old housewife presented with 3 yr history of primary infertility. She had regular menstrual cycles with normal flow with no associated dysmenorrhea. She had undergone a laprotomy- myomectomy 4 years back and subsequently a hysteroscopic myomectomy a year after that.

FERTILITY INVESTIGATIONS- Her AMH was low- 0.51 ng/ml. Pelvic scan showed anteverted uterus measuring 7.6×4.8 ×6 cm. Multiple Sub Serous Fibroids and Intra Mural Fibroid were present ranging between 1.5-2.5 cm. 3D cavity showed one Sub Mmucous Fibroid 2cm. Both ovaries were seen adherent to uterus with low AFC. Husband's semen analysis was normal.



Endometrial cavity with no evidence of fibroid.

Postr wall submucous fibroid

CASE REPORT-SEPTATE UTERUS WITH DOUBLE CERVIX AND LONGITUDINAL SEPTUM

Dr Abhilash Antony

30 year old nulliparous women presented with complaints of congestive dysmenorrhea and superficial dyspareunia. She was evaluated for primary infertility and diagnosed to have uterine and cervical anomaly. Menarche was attained at 14 yrs age. She gave a history of vaginal dilatation one year back for coital difficulties. Gynecological examination revealed normal external genitalia, longitunal vaginal septum in the upper half of vagina and two normal appearing cervix. Ultrasound reveals two widely separated endometrial cavities with endometrial thickness of 4.9 & 6.4 mm respectively.

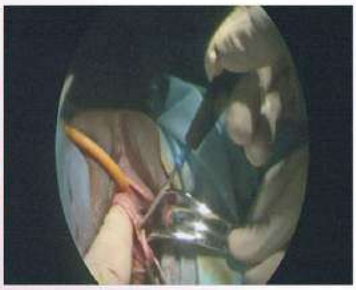
She was taken up for hystero-laparoscopic evaluation. Septum was seen extending from the uterine fundus through the cervix till the vagina. The Vaginal portion of septum was excised using monopolar electrode and uterine and cervical portion excised hysteroscopically using Colin's knife. Diagnostic laparascopy reveals normal sized uterus with slight dimpling in the fundus and normal appearing tubes and ovaries.After resection of this fairly dense septum, normal cavity was visualised. The patient's postoperative course was uneventful. Estrogen and progesterone therapy was given for endometrial regeneration.

DISCUSSION

During embryogenesis, the uterus, fallopian tubes, cervix, and upper two-thirds of the vagina develops from the mullerian ducts, while the lower third of the vagina forms from the ascending sinovaginalbulb.In general, complete formation of the genital tract is dependent on three stages: organogenesis, fusion, and septal resorption. The American Society of Reproductive Medicine has classified Müllerianan omalies into seven categories- (i) hypoplasia or agenesis, (ii) unicornuate uterus, (iii) didelphic uterus, (iv) bicornuate uterus, (v) septate uterus, (vi) arcuate uterus, and (vii) T shaped uterus from diethylstilbestrol exposure. Among different types of structural uterine anomalies, the septate uterus is the commonest and results from failure of the resorption of the midline uterine septum between the two fused Mullerian ducts. The septum divides the uterine cavity and can extend all the way down into the cervical canal. Uterine cavity may thus be affected partially or completely, depending on the size of septum. Longitudinal vaginal septums are associated with a uterine anomaly (septate or didelphys) in 95% of cases. However, complete septate uterus with a cervical septum and longitudinal vaginal septum is a rare uterine anomaly.

Ultra sound suggestive of septate uterus

vaginal septum



Excision of vaginal septum

Hysteroscopic septal resection

PLAN

Patient was counseled and planned for IVF. Prior to IVF, a decision was taken to remove the fibroid. Initially while performing the diagnostic hysteroscopy no submucous fibroid was visualised on distending the uterine cavity with normal saline. As we had a pre-op pelvic scan showing a 2 cm submucous fibroid, we lowered the intra uterine pressure and this resulted in the gradual emergence of a bulge in the posterior wall which was consistent with the utrasound picture seen previously. The fibroid was removed with 26F resectoscope using wire loop and bipolar cautery current.

DISCUSSION

Uterine fibroids occur in upto 30% of women of reproductive age. The evidence regarding the effect of fibroids on fertility depends mainly on the type of fibroid. Current observational data suggests the presence of a detrimental effect on fertility of submucous fibroid. Such cases highlight the importance of pre-op USG. Had the SMF not been detected pre-operatively, it could have been easily missed on hysteroscopy. Hence it may be prudent in suspicious cases to lower the intrauterine pressure to check for hidden bulges.

The management of a couple presenting with uterine fibroids continues to pose a challenge to the practising fertility specialist. Adequate counseling, thorough pre-treatement assessment and adopting a management strategy structured around the patient's progress are likely to have contributed to the optimal management of this patient.

OVARIAN FIBROMA- An Incidental Finding

Dr Nimisha Ch

INTRODUCTION : Ovarian fibroma is a solid tumor that belongs to sex cord stromal cell tumors of the ovary and comprises spindle shape fibroblastic cells and abundant collagen. They are the most common benign solid tumors of the ovary, which account for 1-4% of benign tumors.Ovarian fibroma is often difficult to diagnose preoperatively and usually misdiagnosed as uterine myoma because of the ultrasonic similarities.Ascites is occasionally present and is sometimes complicated by pleural effusion, which is called Meig`s syndrome.This tumor occurs generally in elderly patients.

CASE REPORT : Mrs X, 30yrs old,married since 5 years taking treatment for primary infertility. USG showed uterus to be anteverted of normal size with both ovaries normal. She was planned for a diagnostic laproscopy in view of primary infertility of 5 years duration

Intraoperatively, patient was found to have a growth of 3 x 2 cm on left ovary which appeared clinically like an ovarian fibroma. The same was excised and sent for HPE. Left ovary was reformed following excision of fibroma. Histopathology report was suggestive of ovarian fibroma.

DISSCUSSION :

As discussed in our case, ovarian fibroma is often difficult to diagnose and the tumor is not often diagnosed accurately until the time of surgery. There are no characteristic symptoms and the USG findings cannot easily distinguish ovarian fibroma from uterine myoma or even other types of ovarian mass. High levels of serum CA125 in many of these cases may frequently cause misdiagnosis of malignant ovarian neoplasia.

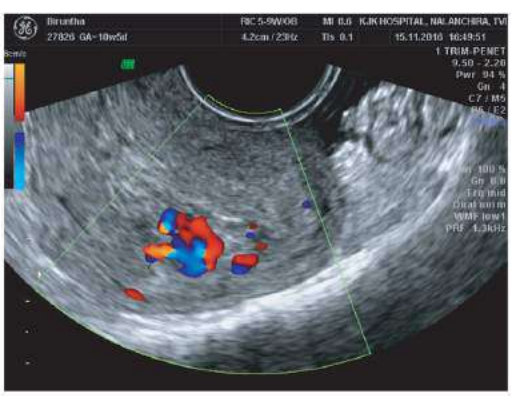
Surgery is the unique treatment for ovarian fibroma. Salpingo-oophorectomy can be considered in perimenopausal or postmenopausal women, and cystectomy should be performed in younger age.

Fibroma being excised

A DIAGNOSTIC DILEMMA!

Dr Revathy Panicker

21 Year old Mrs X, P1L1 (LCB - 2 years) with regular cycles presented to our OPD with complaints of amenorrhea of 1 month followed by irregular bleeding PV. On evaluation UPT was positive, Bhcg was 638mIU/L. She was subjected to a transvaginal scan- her scan picture showed small anechoic spaces of size 18 mm and 10 mm in the subendometrial region with increased vascularity. Two echogenic areas of 15 mm were also seen. The initial diagnosis was of retained products but in view of the increased vascularity, AV malformation could not be ruled out. A repeat scan was carried out by the radiologist which also showed hyperechoic areas in the upper uterine cavity adherent to the anterior wall towards right side with increased focal subendometrial flow. Radiologist gave opinion as Adherent products of conception and she was thus taken up for suction evacuation after arranging blood.

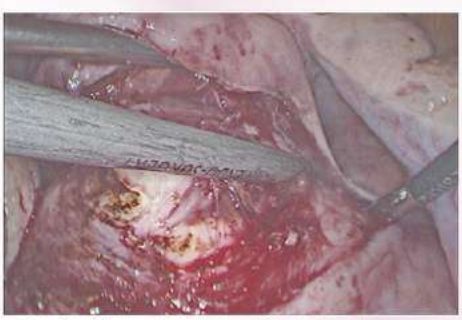


Suction evacuation was carried out uneventfully. Histopathological report was that of products of conception with degeneration

A Difficult Myomectomy

Dr Ashwin Jayakrishnan

32 year old Mrs Y, married for 10 years, nullipara, diagnosed to have a subserous fibroid was referred for surgical management to KJK Hospital. On per vaginal examination, the uterus was retroverted, 8 weeks size enlarged with a fibroid and the mobility was restricted. TVS done showed a uterus 7 X 4.5 X 5 cm with a posterior fundal subserous fibroid of 9.2 X 8.6 cm and an endometrial thickness of 12 mm with normal adnexa. After preliminary evaluation she was posted for operative laparoscopy and diagnostic hysteroscopy. On hysteroscopy there was a complete uterine septum and an endometrial polyp in the left cavity. Septal resection and polypectomy was carried out. During laparoscopy, a large posterior Subserous fibroid impacted in the POD was noted. Using a single myoma screw it was difficult to mobilize the fibroid. Hence we used 2 myoma screws to lever out the fibroid from the POD by slow and steady traction. Bit by bit the myoma was enulcetaed from the capsule and later morcellated out.



Gradual levering out of impacted myoma

Picture after suturing of myoma bed

DISCUSSION

Laparoscopic myomectomy is a safe and feasible procedure in appropriately selected patients. Laparoscopic myomectomy has resulted in remarkable advantages for the patient in medical, social, and economic terms, with less postoperative pain and shorter recovery time.

The operative technique comprises four main phases: hysterotomy; enucleation; suture of the myomectomy site and extraction of the myoma. Myoma screws are used to lever out fibroids by the principle of traction and counter traction.

Retreival of the fibroids is then done by using a morcellator which strips the myoma into small fragments which are then easily retrieved. Small myomas can also be retrieved by colpotomy or mini-laparotomy.

DISCUSSION

Acquired uterine arteriovenous malformation developing in retained products of conception or otherwise can be a diagnostic dilemma. Uterine AVMs are considered rare but can be life-threatening causes of vaginal bleeding. The true incidence of traumatic uterine AVMs is unknown, but we suspect that this entity is more common than the literature suggests. Sonography is the imaging modality of choice, color and spectral Doppler features of uterine AVMs are consistent and diagnostic. A similar sonographic picture can be seen in patients with positive βhCG findings. In this clinical setting, one should consider a diagnosis of intrauterine pregnancy, ectopic pregnancy, retained products of conception, or GTD. In each of these entities, uterine arteriovenous communications have been described. The diagnosis of a uterine AVM should be based on pertinent patient history, negative βhCG findings, and the characteristic color/spectral Doppler findings. Once the correct diagnosis of a uterine AVM is made, further treatment is based on the clinical status of the patient. Patients who are anemic or hemodynamically unstable should be referred for angiography and embolization. Patients with a single episode of bleeding who are hemodynamically stable can be treated conservatively. Many of these patients will remain asymptomatic, suggesting that traumatic AVMs do spontaneously regress. If patients have recurrent bleeding, then embolization is indicated.

When the whole Ovary Twisted....

Dr Ravi Shankar

Ovarian torsion is a rare entity and the diagnosis is commonly missed.

Torsion of a stimulated ovary occurring after in vitro fertilization (IVF)/intrauterine insemination (IUI) is a rare event. Ovarian torsion should be suspected and ruled out in any female undergoing ovulation induction for IUI or IVF, presenting with severe abdominal pain. Delay in diagnosis and management could lead to ischemic necrosis of ovary.

Here we present a case of ovarian torsion.

A 27 year old woman with history of infertility (male factor- severe OATS) underwent IMSI treatment and conceived. She presented to us at 8 weeks of gestation with complaints of severe abdominal pain, mostly on the right lower abdominal quadrant, non radiating; associated with 2 episodes of vomiting.

No history of burning micturition, loose stools, fever or bleeding per vaginum.

On examination, her vitals were stable and abdomen was soft and non tender without any signs of guarding or rigidity.

She was admitted for observation and parenteral analgesics were given. Although there was mild relief of pain the patient was not comfortable. Her total count was raised- a USG abdomen done showed a sinle live intra uterine gestation of 8 weeks with bilateral enlarged ovaries (6-7 cms) with normal peripheral blood flow with minimal fluid in the POD.

Inspite of the blood flow being present in the ovaries, as she was in severe pain, she was taken up for emergency laparoscopy the next morning. Though the differential diagnoses included appendicitis, corpus luteum haemorrhage and torsion, it turned out to be torsion of the enlarged right ovary.

As the ovary did not regain its natural color after de-torsion, we proceeded with adnexectomy. The patient was asymptomatic after the procedure.

Important points to remember:

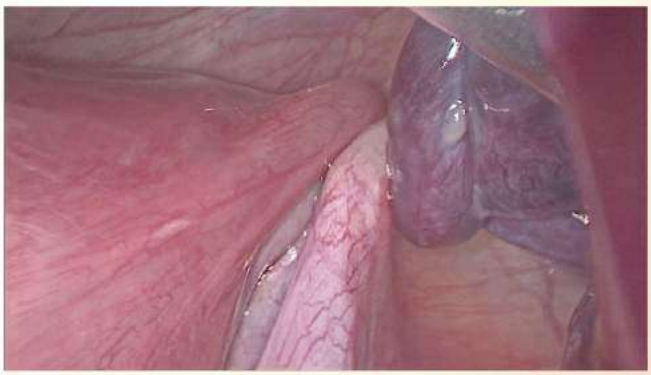
- Always keep torsion of ovary as a differential diagnoses in patients with acute abdomen with history of ovarian stimulation for IVF/IUI.
- Presence of normal vascularity of ovaries on USG does not rule out torsion as the arterial blood flow gets cut off only in the later stages.
- Laparoscopy with provisions for an appendicectomy (in case of right sided pain) would be the best mode of treatment for such situations.

DISCUSSION

Ovarian torsion is the 5th common gynecological emergency with reported prevalence of 2.7%. Torsion of a hyperstimulated ovary is much more rarer. In 20% cases it accompanies with pregnancy, with right ovary more commonly affected. In 10% contralateral ovary is also torsed.

Grey scale USG combined with Doppler is the method of choice for imaging of lower abdominal pain in female. Grey scale ultrasound features of torsion include unilateral ovarian enlargement of more than 4 cm which is the most consistent finding. Torsed ovary is usually located in midline and superior to the fundus of the uterus. Volume of the affected ovary may be upto 28 times more than normal. Free fluid in cul de sac is a nonspecific finding. Additional findings include deviation of uterus to the twisted side and engorged blood vessels. Thus comparison with the morphological appearance and flow pattern of contralateral ovary will aid in diagnosis. A torsed ovary is almost always associated with abnormal morphological appearance.

Presence of arterial waveforms may be explained because the symptoms may result from venous thrombosis occurring before arterial obstruction and dual blood supply of the ovary. The utility of Color Doppler imaging is in determining the viability of affected ovary preoperatively.



Twisted ovary

Colpectomy

Dr Mini

Mrs.SL 82 year old lady with history of mass per vaginum for the last one year, came to us with complaints of increased frequency of micturition and inability to initiate micturition without reducing the mass. She was a parous lady with three previous normal deliveries with her last child birth being 53 years ago. She attained menopause at 50 years of age and had undergone Vaginal hysterectomy with pelvic floor repair 15 years ago (ovaries conserved) for prolapse uterus. Her husband had died 15 years ago.

On examination, no SUI was demonstrated. The vault was seen to be lying completely outside the vaginal introitus with a large cystocoele and rectocoele. Vaginal examination was unremarkable. A decision was taken to perform a total coplectomy for her as she wanted a permanent solution for her problem and did not wish to retain her sexual function.

Operative Procedure - After cleaning and draping of the area ,patient in lithotomy position, bladder extent was identified. Anterior incision put 2 cm below the urethral meatus and then extended posteriorly 2 cm above hymenal ring. Total Colpectomy done. 2-0 vicryl used to approximate both walls. Corrugated drain placed. CBD draining clear urine at completion of surgery.

At post op check up, patient was found to be comfortable with no urinary symptoms.

DISCUSSION

The increasing population of elderly women in our society has definitely resulted in an increase in the number of elderly women seeking help for pelvic organ prolapse. With increasing life span now we are encountering more of post op vault prolapse also.

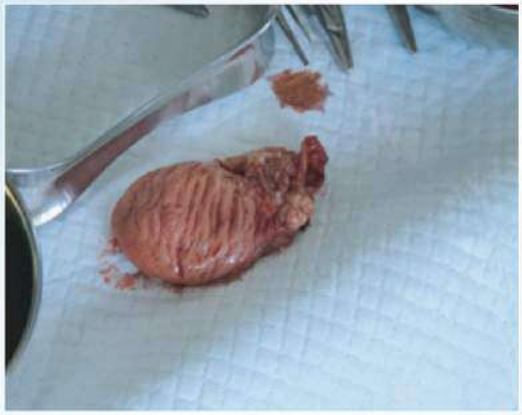
Le Fort in 1876 described the first central type of partial colpectomy for prolapse. From then on, there have been many variations of this surgery that leads to complete loss of sexual function.

The most common objections to a colpocleisis are that bleeding from the genital tract due to a carcinoma in future if any, can't be evaluated, there is risk of pyometra developing, the patient has to be leading a celibate life as any vaginal intercourse is not possible after the operation, also there may be a possible development of stress incontinence due to alteration of the urethra vesical angle and any existing enterocoele is not corrected by this surgery.

The surgery however needs to be retained as one that is going to improve the quality of life of our elderly population tremendously.

Vault prolapse

Colpectomy in progress



Colpectomy specimen

Final picture post surgery

STATISTICS

Jan. - Nov. 2016

TOTAL SURGICAL PROCEDURES	878
TOTAL LAPAROSCOPY	305
OPERATIVE LAP	268
DIAGNOSTIC LAP	37
TOTAL HYSTEROSCOPY	393
OPERATIVE HYSTERO	62
DIAGNOSTIC HYSTERO	331
OPEN CASES	4
GENERAL SURGERY CASES	3
MALE SURGERY CASES	19
MINOR	95
OBSTETRIC CASES	229
HYSTEROSCOPIC PROCEDURES	
SEPTAL RESECTION	11
SMF RESECTION	6
POLYPECTOMY	31
IU ADHESIOLYSIS	6
BIOPSY	4
CANNULATION	4
LAPAROSCOPIC PROCEDURES	
TLH	32
TLH WITH BSO	12
LAVH	1
MYOMECTOMY	53
PCO DRILLING	34
LAP STERLISATION	17
ADNEXECTOMY	13
OVARIAN CYSTECTOMY	24
PARA OVARIAN CYSTECTOMY	5
RECANALISATION	2
OTHERS	70
SURGERY FOR ECTOPIC	
LAP SALPINGECTOMY	20
SALPINGOSTOMY	7
CORNUAL ECTOPIC RESECTION	01
SURGERY FOR ENDOMETRIOSIS	
COAGULATION OF ENDOMETRIOTIC DEPOSITS	33
USG GUIDED CYST ASPIRATION	2
CHOCOLATE CYSTECTOMY	19
ADHESIOLYSIS-OVARIOLYSIS	15
OTHER MAJOR SURGERIES	
TAH WITH BSO	2
TAH	03
VH with PFR	01
VAULT PROLAPSE REPAIR	01
COLPOTOMY	1
LAPAROTOMY	2
TVT-O	01
UMBILICAL HERNIA REPAIR	01
CHOLECYSTECTOMY	01
GENERAL SURGERY CASES	
LABIAL ADHESIOLYSIS	1
STENT REMOVAL	1
LIPOMA EXCISION	1
MINOR CASES	
SUCTION EVACUATION	25
CERVICAL ENCIRCLAGE	53
MIRENA INSERTION	3
AMINOCENTESIS	6
FRACTIONAL CURETTAGE	3
ERA	3
WOUND RESUTURING	2
OBSTETRIC CASES	229
MALE SURGERIES	
NAB	7
TESA/PESA	9
VARICOCOELECTOMY	02
Micro TESE	01
CONCEPTION STATISTICS	
SPONTANEOUS	68
COH ONLY	67
TOTAL POST LAP CONCEPTIONS	39
IUI	13.8 %

IVF/ICSI STATISTICS JULY - NOVEMBER 2016	
TOTAL NO: CASES	371
FROZEN ET	81
TOTAL CONCEPTION RATE (IVF/ICSI)	38.1%
CONCEPTION RATE AFTER FROZEN ET	34.3 %

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