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A Case Series of Ovarian Tumor

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Abstract

Introduction: Ovarian-cancer is the 3rd most-common cancer in Indian-women, accounting for 3% of all malignancies and 6% of deaths from cancer. It is 5th most-common cause of death from malignancy in women.[1]

Case-presentation: This is a cases-series of 4 cases

Case 1

62 year, postmenopausal-woman with abdominal-pain and ultrasound report of 109x82x87mm right-ovarian-simple-cyst of (410cc), Ca-125 -> 8.50, posted for Laparotomy. A 15x 10cm right- ovarian-cyst removed.

Frozen-section -> benign.

Histopathology-> serous-cystadenoma

Case 2

43-year, nulligravida. With pain-abdomen, posted for laparoscopic-cholecystectomy for gall-bladder-polyp with intraoperative findings of bulky-ovaries with ascitic-fluid showing malignant-cells , Ca-125 -> 66 , ultrasound s/o enlarged (7.6x6.4 cm) right-ovary, .Posted for exploratory-Laparotomy .Bulky irregular-ovaries removed.

Frozen-section ->granulosa-cell tumour,

Histopathology-metastatic adenocarcinoma / malignant sex-cord-stromal tumour.

Case 3

70-year-old, COVID-19-positive patient referred for ovarian-torsion, with Ca125 - 8.7. Ultrasound -> 66x55 mm left adnexal-cyst with torsion; Posted for left-ovariotomy + right-salpingoophorectomy. A 7x7cm left-sided-haemorrhagic-ovarian-Cyst removed. Histopathology -> serous-cystadenofibroma.

Case 4

67-year-old postmenopausal-woman with pain-abdomen, Ca-125-154, ultrasound showing 14 x 7.5cm right-ovarian-complex-cyst, posted for Exploratory-laparotomy, a 15x15 cm twisted-right-ovarian-haemorrhagic cyst removed.

Frozen-section->benign

Histopathology ->Rt ovary- serous-cystadenoma + torsion

Discussion: Ovarian cancer has nonspecific-symptoms resembling those of less serious conditions. Eg. Pain-abdomen.

Staging-laparotomy with frozen-section remains the preferred approach for ovarian-tumors.

Conclusion: In my case-series 3/4 women were postmenopausal, all presented with vague symptoms of pain-abdomen.

Frozen-section may not be conclusive in every case, hence staging-laparotomy is ideal modality of management.

Keywords: Ovarian tumour, CA-125, Exploratory-Laprotomy, Frozen-section, Histopathology.

Introduction

Ovarian cancer is the third most common cancer in Indian women, accounting for 3% of all malignancies and 6 % of deaths from cancer. It is fifth most common cause of death from malignancy in women.[1]

It generally presents with vague symptoms; hence the diagnosis is generally missed at an early stage, and is usually detected at advanced stage.

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Ovaries are paired organs measuring 4 x 2.5 x 1.5 cm each in dimension[2] situated one on each side of uterus close to lateral pelvic wall.

Pathology of ovary is most difficult gynecologic disease to evaluate clinically.[3]

The ovarian tumor arises from the germ cell, the coelomic epithelium and the ovarian stroma or may arise as secondary tumor to a primary gastrointestinal malignancy.

The protective factor includes-Multi parity, Oral contraceptive pills, Prophylacticoophorectomy, Lactation.

CASES

Case 1

My patient 62 year old came to Bharati hospital with complaints of pain in abdomen since 2–3 months,located in lower abdomen,non radiating, with no aggravating or relieving factors. She also complaints of burning micturition since 8 months, on and off, pain was more before voiding. No h/o loss of weight /appetite. No bowel complaints.

Menstrual history: Post-menopausal since 25–30 years.

Past history: Known case of DM and Hypertension since 7 years on treatment.

On Tab Glycomet bd , Tab Nicardia 20 mg BD

Obstetric History: Married for 46 years, P4L4, all Vaginal delivery,

Tubal Ligation done

Family history – NAD

On examination – General condition fair, average built

PR- 98/min, BP 140/90mmhg

CVS/Rs, Breast- Normal

P/a –

Inspection: Abdomen flat, a mass seen at suprapubic area of 10x10cm.

Umbilicus Inverted.

No Dilated Veins, Visible Peristalsis, Laparoscopy scar+ healthy

Palpation-soft, , a mass seen at suprapubic area of 10x10cm , regular margins,no evidence of free fluid.

P/s- cervix – atrophic vaginitis, rugosity lost, minimal cystocele and enteroceel + cervix flushe with vagina, atrophic.

P/v- uterus – consistent with post menopausal status,big ovarian cyst felt in right fornix,cervix flused with vagina,left adnexa not palpable.

P/R- rectal mucosa free

Diagnosis: 43 year old Nulligravida with right ovarian cyst with right kidney anfiomyolipoma.

Investigations

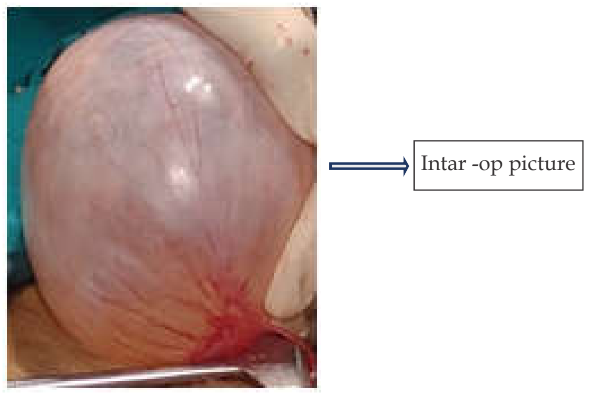
- hb/tlc/plt-11.6/14200/3.42
- s.b-hcg – 1.27
- ldh-200
- ca-125- 8.50
- cxr – normal
- pap smear- nilm
- ct scan (abdomen+ pelvis)- 29/6/2020
- a large well defined cystic mass lesion in the right adnexa of 9,8x9.1x8,8cm and extending into the lower abdomen suggestive of right ovarian cyst. A well defined encapsulated fat density lesion in the right upper pole of kidney s/o Angiomyolipoma.
- USG ABDOMEN and PELVIS ON 3/7/2020
- A large cyst seen anterolateral to the atrophic uterus of 109x82x 87cm (410cc), It most probably arises from right ovary and has features of a simple cyst.No e/o solid mass/endometriosis seen. Left ovary atrophic not seen. A 68x46x48mm diameter angiomyolipoma is incidentally seen at the upper pole of the riht kidney.No other abnormalities seen.

Procedure: Exploratory Laprotomy + Tah + Right Ovariectomy + B/L Salphingectomy with Left Oophorectomy

Anaesthesia: general + epidural

- Intraoperative findings-
- A 15 x 10cm cyst arising from right ovary is seen
- Cyst appeared to be simple ovarian cyst on palpation, cystic with no solid components, smooth margins with no adhesions
- Uterus – atrophic
- Left ovary – normal ,atrophic
- Uterus specimen- atrophic endometrium, cavity-normal, cervical canal-normal

- Frozen section- benign lesion
- Hpe was s/o-> serous cystadenoma of right ovary. Endometrium- cystic atrophy, myometrium- unremarkable, cervix- chronic endocervicitis, left ovary- simple cyst,



Intar -op picture

Case 2

- 43 year Old, nulligravida, came to Bharati hospital referred from surgery department with complaints of pain in abdomen 4–5 months, dull aching, non radiating
- She was operated for lap cholecystectomy on 27/6/20.She was detected to have bulky ovaries intraoperatively, her ascitic fluid tap showed cells suspicious of malignancy.

Pain was

- Insidious in onset, gradually progressive
- Localized to lower abdomen
- No relieving and aggravating factors, not association with food intake.
- No history of palpable lump or any obvious swelling .
- She also gives history of weight loss and loss of appetite.
- Hence her staging laparotomy with frozen section with pan hysterectomy was planned.

Menstrual History

LMP-26/6/2020

PMH- 4-5 days/28–30 days/rmf.

No h/o heavy menstural bleeding

No h/o passage of clot

Obstretic History

Married since 23 years, nulligravida

General examination

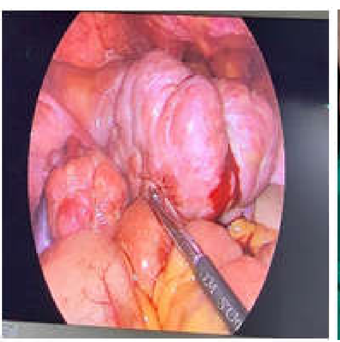
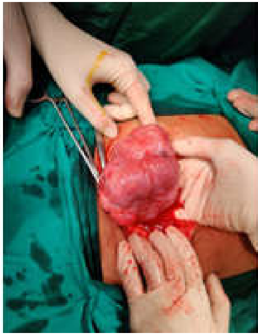
- No pallor/icterus/edema/lymphadenopathy
- PR- 80 bpm, BP 110/70mmhg
- Systemic check up:
- R.S – clear,bilateral air entry equal
- CVS – NAD
- Breast- normal
- P/A –
- Inspection- Abdomen flat
- Umbilicus Inverted.
- No Dilated Veins, Visible Peristalsis, Laparoscopy scar+ healthy
- Palpation-soft non tender ,no mass palpable, no evidence of free fluid
- P/s- cervix – cervix and vagina - healthy
- P/v- uterus – bulky, anterior fornix fullness
- Right lateral fornix fullness
- No forniceal tenderness
- No appreciable mass on pv examination
- P/R- rectal mucosa free

diagnosis -43 year old nulligravida with bilateral ovarian malignant tumor.

Investigations

- hb/tlc/plt-12.2/10,000/3.35
- s.b-hcg <1.20,ldh-1104,ca-125-66
- 27/06/2020, cytology report.
- asctic fluid – suspicious for malignancy
- cxr – normal
- PAP SMEAR- NILM
- CT Scan (Abdomen+ Pelvis)- 24/5/2020
- Uterus - Appear normal, right ovary enlarged 7.6x6.4 cm shows cystic lesion measuring 4x2.8cm within. Left ovary enlarged 5.2x4.4 cm in size. No abdominal/pelvic lymphadenopathy.
- USG Abdomen and Pelvis ON 24/6/2020
- Uterine outlines are poorly visualised due to the pelvic mass. Endometrium measures 6 mm.
- Right ovary measures 8.2 x 6.8 x 4.5 cm.
- Left ovary measures 5.2 x 5.1 x 4.4 cm.
- Both ovaries are enlarged, hypoechoic and heterogonous in echotexture. They show raised vascularity.

- Small amount of free fluid is seen in pod and interbowel Region.
- No significant para aortic lymphadenopathy.

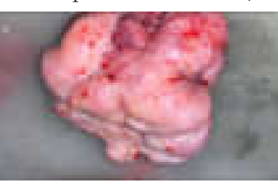



Procedure: Exploratory Laprotomy + TAH + BSO + Omenectomy + Appendicetomy

- Anaesthesia: general +epidural
- Intraoperative findings-
- Minimal ascites noted – fluid collected for histopathology.
- Omental thickening present
- Appendix thickened
- Liver and undersurface of diaphragm were normal
- Evidence of b/l ovarian masses around 8x9 cm with irregular surfaces
- Pouch of douglas thickening present on both uteroscaral. Right parametrium thickening present
- Bilateral Ovarian masses removed and sent for Frozen section.
- Appenedectomy done,partial infracolic omenectomy done.
- Frozen section – suggestive of granulosa cell tumour
- Hpe was s/o->
- Poorly differentiated malignancy of both ovaries

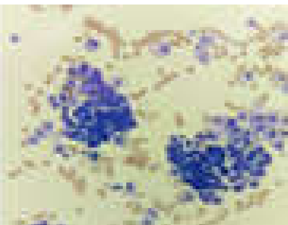
1. Suggestive of metastatic adenocarcinoma

Right ovary m 8x8x5cm. The external surface is nodular. The capsule is intact. C/s

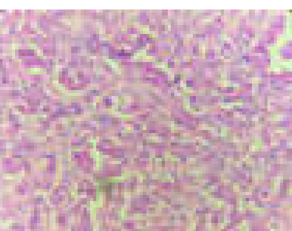


Specimen consists of left ovary m 7x7x3.5 cm. The external surfaceis nodular.

2. Malignant sex cord stromal tumor.



Ascitic ? uid-Highly cellular smears. Cells singly scattered, 3D clusters Eccentrically placed nuclei some nuclei



Tumor cells arranged in solid sheets and microfollicular pattern Call-

- Her IHC markers were later sent which came as Ck 20 and 7 positive and inhibin negative. She underwent 2 cycles of chemotherapy postoperatively and presented to hospital after 1 month with complaints of acute abdomen and was diagnosed to have bowel perforation and emergency ileostomy was performed.

Case 3

70 year old P4L4 came to Bharati hospital referred from a local doctor Ivoovarian torsion. She came with c/o severe abdominal pain since morning, sudden in onset, spasmodic, located more in left iliac fossa. She also c/o vomiting 2–3 episodes since morning, No h/o loss of weight or appetite. No bowel or bladder complaints. No h/o fever/cold/ cough. She was referred here with usg report s/o left adnexal (left ovarian) cyst of 66x55mm with features of torsion.

Patient was admitted and was managed conservatively. Her symptoms subsided was repeated at Bharati hospital which was suggestive of 6.4x5.3x6cm predominantly cystic left adnexal mass with focal thickening posteroinferiorly with no definite e/o torsion. Her covid testing was done on day 2 of admission which turned out to be positive, hence patient was shifted to covid ward for further management.

Menstrual History

Post menopausal since 20 years.

Obstretic History

P4L4, all Normal vaginal deliveries,

TL DONE

On examination- patient was thinly built

- No pallor/icterus/edema/lymph adenopathy
- PR- 110 bpm, BP 110/70mmhg
- Systemic check up:
- R.S – clear,bilateral air entry equal
- CVS – NAD
- Breast- normal
- P/A –
- Inspection- Abdomen flat
- Umbilicus Inverted.
- No Dilated Veins SEEN, TL SCAR +
- Palpation-soft tenderness present in left iliac fossa, no guarding/rigidity,no mass palpable, no evidence of free fluid
- P/s- cervix – cervix and vagina - healthy
- P/v- uterus – cervix taken up, a cystic swelling of 8x6cm felt in left side, left fornices fullness present,tenderness present, Right fornix- free,non tender
- P/R- rectal mucosa free
- DIAGNOSIS -70 year old p4l4 with ovarian tumor with covid positive status

Investigations

- hb/tlc/plt-12.4/7,700/1.76
- s.b-hcg 2.16
- ldh-431,ca-125-8.7
- cxr – normal
- pap smear- nilm
- usg abdomen and pelvis on 12/7/2020.

uterus postmenopausal shows myometrial calcification.a small endometrial collection is seen. no obvious endometrial thickening.right ovary with normalvascularity.It contains multiple small clear cysts.A predominantly cystic left ovarian mass is seen measuring 6.4x5.3x6.0cmmore towards midline.no obvious twisted pedicle could be visualised.This appears contagious wit left ovary which contains a subcentimetric cyst,left ovary measures 7x6x7.2cm .it is enlarged in size.

Procedure: Left Ovariotomy + Right Salpingoophorectomy

- Anaesthesia :general +epidural
- Intraoperative findings-
- Left Sided Haemorrhagic Cyst of 7x7cm, capsule ruptured
- Right sided ovary having multiple small cysts
- Uterus post menopausal size
- Evidence of Lap tl seen on b/l tubes
- Hpe was s/o->Right and left ovary- serous cystadenofibroma.

Case 4

My patient 67 year old postmenopausal woman came to Bharati hospital with complaints of pain in abdomen since 3 months,located in lower abdomen, non radiating ,with no aggrevating or relieving factors.She also complaints of burning micturition since 1 months ,on and off, .No h/o loss of weight / appetite.No bowel complaints

Menstrual history

Post-menopausal since 15 years.

Past history

Known case of Hypertension since 15 years on treatment.

On Tab Telma 40mg

H/o stroke (left sided paralysis) 2 years back

H/o Cataract surgery done 7yrs back

Obstetric history

Married for 52 years,P5L5, all vaginal deliveries,

Tubal Ligation done.

Family history

NAD

On examination: General condition fair, average built

PR- 70/min, BP 140/80mmhg

CVS/Rs/Breast- Normal

P/a –

Inspection

Abdomen flat , a mass seen at suprapubic area

Umbilicus Inverted.

No Dilated Veins, Laparoscopy scar+ healthy

Palpation-soft, non tender, a mass seen at midline in hypochondrium area of 20x20cm,firmmobile with regular margins,no evidence of free fluid

P/s- cervix – atrophic vaginitis, rugosity lost,

Cases	• 1	• 2	• 3	• 4
Age(yr)	• 62	• 43	• 70	• 67
Complaints	Pain-abdomen Burning-micturition	Pain-abdomen Gall-bladder-polyp	Pain-abdomen Vomiting	Pain-abdomen Burning-micturition
Clinical-finding(P/a)	Suprapubic mass-10*10cm	Soft	Soft, LIF tenderness +	20x20cm midline-mass
Per vaginal	Rt forniceal fullness +, mass of 10cmx1ocm felt	Uterus – bulky, anterior+ Right fornix fullness +	Cystic-swelling of 8x6cm felt in left fornix	Uterus-atrophic, forniceal fullness+
Ca-125	• 8.50	• 66	• 8.7	• 154
Ultrasound	Right-ovarian simple-cyst - 109x82x87cm	Bulky-uterus + 8x9cm irregular bilateral ovarian-mass	Right-ovary – bulky, normal vascularity + multiple clear-cysts. 6.4x5.3x6cm cystic left-adnexal-mass	Right-ovarian complex-cyst of 14x7.5cm ,septations+
CT	Right-ovarian-cyst 9.8x9.1x8.8cm	Rt-ovary 7.6x6.4cm with cystic lesion of 4x2.8cm,	–	Right-ovarian complex-cyst
Surgery	Explaratory-laprotomy	Exploratory-laparotomy	Bilateral-salpingo-ophorectomy	Exploratory-laparotomy
Intraoperative	Uterus-atrophic, 15x10cm rt-ovaria- cyst seen	Minimal ascites , omental thickening+, irregular bilateral ovarian-mass of 8x9cm, POD and Right-parametrium thickening+	7x7cm Left-ovarian haemorrhagic-cyst Right ovary-multiple small cysts +	Midline Right ovarian-cyst of 15x15cms with 1twist Ascites +
Frozen-section	Benign	Granulosa-cell-tumor		Mucinous-cystadenoma
Histopathology	Serous-cystadenoma	Poorly-differentiated malignancy of both ovaries 1. Metastatic-adenocarcinoma 2. Malignant sex-cord-stromal	Serous-cystadenoma	Serous-cystadenoma + torsion
IHC	–	CK7 and CK 20 + INHIBIN - NEGATIVE		
Cytology	Negative	Suspicious	–	Negative
Risk factor	DM+HTN		COVID Positive	HTN H/o stroke
Post op chemotherapy	–	Taken 2 cycles	–	–
Postop complication	–	Had bowel perperation-> underwent ileostomy	–	–

minimal cystocele and enteroceel +,cervix flushe with vagina,atrophic

P/v- uterus – consistent with post menopausal status,b/l forniceal fullness +

P/R- rectal mucosa free

Diagnosis

67 year old Postmenopausal lady with ovarian cyst .

Investigations

- hb/tlc/plt-9.4/12400/1.49
- s.b-hcg – 3.03
- ldh- 540
- ca-125-154
- cxr – normal
- pap smear- nilm
- CT SCAN (ABDOMEN+ PELVIS)- 28/8/2020
- A right ovarian complex cyst of 14 x 7.5cm with septations.Cholelithiasis without cholecystitis present
- USG ABDOMEN and PELVIS ON 26/8

A right ovarian complex cyst of 14 x 7.5cm with septations

Procedure

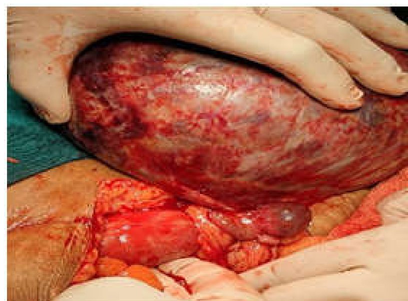
Exploratory laprotomy + TAH + right ovariotomy + leftsalpingo - oophorectomy + infracolic omentectomy

Anaesthesia :general +epidural

- Intraoperative findings-
- Midline Right ovarian-cyst of 15x15cms with 1twist (haemorrhagic black in color)
- Rt sided ovaritomy done
- Liver-granular, ascites +

Frozen Section- Benign Lesion

- Hpe was s/o->,ascitic fluid- nilm
- Rt ovary- serous cystadenoma with features of torsion



Intar-operative picture

Discussion

Early ovarian cancer has nonspecific symptoms resembling those of less serious conditions. Pain in abdomen and burning micturition are common complaints which may present to a general-practioner. Thus, the diagnosis of ovarian cancer is challenging, since it is detected at an advanced stage, requiring exploratory laparotomy

Whenever a patient of ovarian tumour is posted for surgery the staging laparotomy with frozen section remains the preferred approach

Conclusion- In my case series 3 out of 4 women were postmenopausal, all of them presented with vague symptoms of pain in abdomen.

Frozen section may not be conclusive in every case of ovarian tumor, so staging laparotomy is ideal modality of management

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