Borderline Ovarian tumors are tumors of uncertain malignant potential. They have favourable prognosis. They occur in younger women and present at an early stage. They are difficult to diagnose preoperatively as macroscopic picture is a combination of benign and invasive ovarian tumors. Over the years surgical treatment has changed from radical to conservative approach without overlooking oncologic safety. Follow up is essential. Prolonged follow up (> 10 yrs) is required because of later recurrences. Special attention is to be paid to the conserved ovary in follow up.

Miscellaneous: Video Abstract

R-VEIL in carcinoma vulva

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Background: Vulvar cancer accounts for about 3-5% of gynaecologic malignancies. Prognosis is strongly dependent on presence of inguinofemoral lymph node metastases. Effective management of regional lymph nodes is the most important factor in the curative management of early vulvar cancer. Despite careful dissection and maintaining vascularity of skin, surgical morbidity is seen in 50% cases. Video – endoscopic inguinofemoral lymphadenectomy was developed by Bischoff in 2003 by dissecting two cadaveric models and in one patient with stage T3N1M0 penile carcinoma. VEIL is an alternative to reduce the morbidity without compromising the oncologic outcomes. VEIL has continued to evolve into single site and robotic variants. R-VEIL is a minimally invasive procedure duplicating the standard open procedure with less morbidity.

Aims and Objectives: A video presentation to describe the technique of R-VEIL in vulvar cancer and discuss the advantages and outcome.

Conclusions: R – VEIL is an attractive minimally invasive technique to do inguinal block dissection in a single sitting in patients with vulvar carcinoma as the surgeon does not get tired as happens in VEIL technique. R-VEIL allows the removal of inguinal lymph nodes within the same limits as in open procedure and potentially reduces surgical morbidity. It is better accepted cosmetically and reduces hospital stay. Long term oncological results are not available. Randomized multi-institutional studies are required to prove its efficacy over open counterpart.

Miscellaneous: Video Abstract

Radical excision of a massive vulvo-vaginal mass

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Background: Vulvo-vaginal masses have a varied presentation and causes. The most common differential diagnosis are Condylomata acuminata, Vulvar abscess, Vulvar/vaginal cysts, Vulvar carcinoma, Vulvar lipoma, Angiomyofibroblastoma and Aggressive Angiomyxoma. Surgical excision of the mass is the main method of treatment and the outcome differs with the histological diagnosis. We present a video of excision of a massive vulvo-vaginal mass in toto.

Case: A 45 year old P3 L3 female, presented with complaint of mass in perineal area & discharge per vaginum for 2 years. The mass was growing progressively and reached the present size. On examination there was a 9 X 8 cm irregular firm to cystic mass, arising from posterior wall of vagina and protruding out of introitus with bossellated surface. The mass also extended into right ischio-rectal fossa, 10 X 10 cm mass with cystic, smooth surface that was irreducible with no cough impulse. CECT abdomen and pelvis revealed a well-defined 12 X 10 X 8 cm mass in right perineum arising from right lower lateral vaginal wall with ischio-rectal fossa extension. There was no extension into cervix, bladder or rectum. Biopsy taken from the mass was inconclusive. A wide local excision was done under general anesthesia wherein an ischio-rectal and vaginal mass of size 30 X 10 cm with irregular margin was excised in toto. Histopathology was suggestive of Aggressive Angiomyxoma. The patient is under follow up.

Discussion: Aggressive Angiomyxoma is a rare slow growing locally invasive mesenchymal tumor and has a substantial potential for recurrence. It is often misdiagnosed. Pre-operative diagnosis is difficult due to rarity of this entity and absence of diagnostic features, but it should be considered in case of masses in genital, perianal and pelvic region in a woman of reproductive

age. Radical surgical excision is the first line of management. A long term follow up of the case is necessary and MRI is preferred method for detecting recurrences.

Missed Abstracts

Aim: To compare the findings of CT scan pelvis and cystoscopy findings of bladder involvement in carcinoma cervix in VIEW of revised FIGO staging and to demonstrate the accuracy of CT scan for pretreatment diagnosis of bladder involvement.

Methods: A prospective and comparative study was conducted in the department of Obstetrics and Gynaecology, Rajindra hospital Patiala on a number of 100 patients of carcinoma cervix who underwent both cystoscopy and CT scan pelvis to ascertain bladder involvement. Cystoscopy guided biopsy proven cases of bladder involvement were taken as true cases of bladder involvement in the study and the results of both modalities were analysed and compared.

Results: Out of 100 patients of carcinoma cervix, 28 patients showed bladder involvement on CT scan pelvis and 6 patients were proven as positive cases on cystoscopic guided bladder biopsy. The true positives in the study were 6 cases. True negatives were 94 cases. 22 patients were false positive on CT scan findings

and there were no false negative patients for bladder involvement on CT scan pelvis findings in the study. The sensitivity, specificity, positive predictive value, negative predictive value and accuracy of CT scan pelvis for bladder involvement were 100%, 76.60%, 21.43%, 100% and 78% respectively. CT scan pelvis was able to detect all cases of bladder involvement which came positive cystoscopy guided biopsy as well.

Conclusions: With the revised FIGO staging which has given optional status to both CT scan and cystoscopy for bladder involvement in patients of carcinoma cervix, CT scan can be used as the preliminary modality for detecting bladder involvement in patients of carcinoma cervix. The high sensitivity and negative predictive value of CT scan helps choose which patients should undergo cystoscopy and helps in better and more efficient pre-treatment evaluation of patients with carcinoma cervix for bladder involvement.

Uterus: Poster Abstract

Laparoscopic radical hysterectomy: Results, recovery, recurrence – Our experience

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Gynaecology Oncology is a beneficiary of Minimally Invasive Approach. We present our experience. The laparoscopic approach is associated with less surgical morbidity, per operative bleeding and shorter hospital stay though the duration of operation might be longer. It has a longer learning curve. Laparoscopic radical hysterectomy with pelvic lymphadenectomy is a safe surgical option for treatment of Gynaecological cancers taking into account amount of bleeding, complications recovery and recurrence.

Cervix: Poster Abstract

Dosimetric evaluation of sigmoidal and bowel doses in the treatment of carcinoma of cervix using CT based volumetric imaging technique

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Purpose: Radiation therapy is the main stay for the treatment of the cervical cancer. Normal organs such as bladder, rectum, sigmoid colon and bowel loops also get significant dose during treatment of carcinoma of cervix which often results late toxicity. The purpose of this study is evaluate CT

image based volumetric doses of organ at risk and correlate the doses with the toxicity profile observed in cancer patients.

Materials and Methods: Sixty high dose rate intracavitary brachytherapy applications were performed in thirty patients of carcinoma of cervix. External beam therapy was planned for 46 Gy in 23 fractions followed by two brachytherapy sessions of 9 Gy/session. External beam radiotherapy was given by four field box technique to each patient. CT based treatment planning was done for each intracavitary brachytherapy application. Dose volume histogram was used for analysis of volumetric dose parameters and correlated with the RTOG defined normal organ toxicity profile of the patients.

Results: In the follow up of two years 2 (6.66%) patient had died, 12 (40%) patients had reported no significant problem, 3 (10%) patient got bladder toxicity of grade 2, 10 (33.33%) patients had reported small intestine toxicity of grade 1 and grade 2 while no information could be available for 3 (10%) patients. The average volume of rectum, sigmoid colon and bowel loops were 60.34 cc, 22.19 cc and 270.82 cc. The average, median and 2 cc volume doses for rectum 289 ± 121 cGy, 263 ± 113 cGy and 884 ± 444 cGy for sigmoid colon 409 ± 211 cGy, 366 ± 185 cGy and 693 ± 371 cGy resp. and for bowel loops 240 ± 169 cGy, 153 ± 59 cGy and 870 ± 222 cGy. The average and median sigmoid colon point doses were higher than rectum average ($p = 0.000$) and median doses ($p = 0.001$) but 2cc volumetric doses of sigmoid colon are less than rectum 2cc volumetric doses ($p = 0.013$). For bowel loops the 2cc volumetric doses were much higher than average doses ($p = 0.000$) due to its large volume. The recto-sigmoidal toxicity profile were evaluated for sigmoidal max doses and rectum 2 cc volumetric dose profile. There was a poor correlation between rectum 2 cc volumetric dose and sigmoid 2 cc volumetric doses.

Conclusion: According to dose toxicity profile, sigmoidal doses represent an important role for dose constraints but till now no protocol has been formed for reporting the sigmoidal doses. This study attracts the attention for reporting the sigmoidal and bowel loop doses. This study demonstrates the possibility and role of volumetric imaging and dosimetry for improvement in dose constraints.

Uterus: Poster Abstract

Can initial grade of endometrial cancer presenting at Tata Medical Center, predict high risk factors which will require lymph node dissection and adjuvant therapy?

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Background: Pre-operative tumor grade influences the type of surgery planned for endometrial cancer, while the final grade affects the adjuvant therapy.

Aims and Objectives: To predict whether pre surgery tumour grade can predict lymph node dissection and adjuvant therapy in endometrioid endometrial cancer.

Methods: Retrospective observational study. Data was obtained from electronic hospital medical records system. All women with a diagnosis of endometrioid endometrial cancer who attended TMC, Kolkata between September 2011 and June 2015 included. Review of the histology was asked in all patients and MDT was planned for all patients. Most of the patients operated in TMC underwent standard pre-operative imaging work up like MRI pelvis and CT upper abdomen and chest evaluation. Staging/completion surgery included total hysterectomy, BSO, pelvic +/- para aortic lymphadenectomy +/- Omental biopsy. The surgico-pathological evaluation included histology, grade, myometrial invasion, adnexal involvement and nodal involvement.

Results: 155 patients had both initial and final histology. Of total 67 patients with initial grade 1 histology, 8 (12%) were upgraded to G2 and 1 (1.5%) was upgraded to G3. 35 patients with G2 disease 2 (5.7%) were upgraded to G3. Among 8 patients with G3, 7 continued to be G3. Of the 67 patients with initial grade 1, > 50% invasion was seen in 25 (37.3%). Of 35 patients with initial G2, > 50% myometrial invasion was seen in 13 (37.1%) patients. Among 8 initial G3 patients, > 50% invasion was seen in 3 (37.5%) patients. Of these 67 patients with grade 1, pelvic lymph nodes were involved in 4 (6%) patients. None of the grade 2 tumors had pelvic lymph node involvement. One (12.5%) out of 8 patients with initial G3 tumor had pelvic lymph node

involvement. Recurrence was seen in 3/67 (4.5%) of G1 patients, 7/35 (20%) with G2 cases and 1/8 (12.5%) with G3 cases.

Conclusion: Patients with initial G1 disease, about 13% were upgraded. Recurrence rate increased with G2 patients. For all initial grade tumors the myometrial involvement > 50% was 37%. For initial G1 patients the pelvic lymph node involvement was found to be 6%. For G3 tumor the pelvic lymph node involvement was 12.5%.

Ovary: Poster Abstract

Dermoid cyst in an 82-year-old woman: Can be non malignant: Its management

Shravani Chithra, Rahul Manchanda, Hena Kausar, Nidhi Jain, Anshika Iekhi

Dermoid cyst of ovary is the second most common type of ovarian germ cell tumor which constitutes 30 to 40% among ovarian tumors. It occurs mostly in women of reproductive age group between 20 and 40 years and very rarely in postmenopausal women. Postmenopause has its own set of **symptoms and risks**. One such risk is the possibility of malignancy of ovarian cyst with an incidence of 0.5 to 2%. We present an unusual and rare case of an 82 year old woman, who presented with complaints of pain abdomen and constipation for one year duration. Colonoscopy revealed diverticulitis. Despite being treated for diverticulitis, her symptoms persisted. CT was done which showed a right ovarian mass. Diagnostic laparoscopy was done and pus seen in the abdominal cavity was collected, bowel was distended, and dermoid cyst of ovary of 12×10 cm size which had undergone torsion three and a half times. Detorsion of ovary with right oophorectomy was done. Histopathology confirmed features of dermoid cyst with torsional changes in the wall and focal gangrene with no evidence of malignancy. Dermoid cyst occurs very rarely in postmenopausal women and treatment of choice is oophorectomy. Authors with this case highlight the proper management of ovarian dermoid cyst in symptomatic postmenopausal women.

Key words: Dermoid; malignancy; oophorectomy; torsion

Miscellaneous: Poster Abstract

Sujata Das

Haemangiomas of the ovary are very rare neoplasms with a wide age range and present with pain lower abdomen and adnexal mass. Many a times this is an incidental finding on surgery. These neoplasms should be considered in the differential diagnosis of haemorrhagic ovarian lesion. A 48 yr old female presented to us with pain lower abdomen and adnexal mass. Her routine investigations were normal. Her tumour markers were S. LDH 213, CEA 1.72, CA 125 was 2.3. Ultrasound findings showed a well defined echogenic mass in left ovary measuring 6 x 3.4 cm with no ascitis. Her cervical cytological findings were within normal limits. Staging laprotomy was done and a bilobed solid ovarian mass was identified on left side. TAH with BSO was done and specimen saved for histopathology that finally showed cavernous haemangioma of ovary. Post op recovery was uneventful with subsequent relief of pain.

Miscellaneous: Poster Abstract

A rare case report of incidental solitary uterine metastasis in primary invasive lobular carcinoma of breast

Vivek Gupta, Amita Mishra, Namit Kalra, Bhawna Narula

Introduction: Infiltrating Lobular carcinoma (ILC) of the breast is second most common cancer of breast next only to Infiltrating ductal carcinoma (IDC). It has a different metastatic pattern as compared to the IDC. Breast cancer is the most frequent primary site which spreads to gynaecologic organs.

Case Presentation: A 40 yrs old Iraqi lady presented as a diagnosed case of lobular carcinoma of left breast. She had already undergone a lumpectomy at Iraq a month back and now had come for completion of treatment. On