(49%), III in 46 (20%) and unknown in 3. 144 pts were FIGO stage I (22%), 49 in II (22%), III in 25 and stage IV in 5 (2%). Treatments were done with Surgery (TH/BSO) plus radiotherapy (RT) EBRT/brachytherapy in 174 pts (78%), Surgery+EBRT in 16 pts (7%), EBRT/brachytherapy in 26 pts (12%) and EBRT in 7 pts (3%). In 93 pts completed surgical staging with pelvic and para-aortic lymphadenectomy was performed. EBRT pelvic doses were already 45 Gy with multiple conformed fields based on CT treatment planning and brachytherapy 450 cGy x 4 sessions.
Results: With a median follow-up of 78 months (range 6–136 m), the actuarial overall survival of the complete cohort of pts was 56 months and 71.3% are alive and free of disease, 142 pts (75%) in the group treated with surgery and RT and 17 with RT alone (52%); there were 10 loco-regional relapses (4.5%), 3 in the group treated with surgery and 7 with RT alone, with complete loco-regional control of disease in 188 pts (84%). Prognostic factor as stage, histolology, tumour grade and treatments/lymphadenectomy will be analyzed. Toxicities according RTOG system were mainly grade I−II.
Conclusions: In our experience, radiotherapy treatment of endometrial carcinomas offers an excellent local control of disease with satisfactory overall survival with multidisciplinary management. New RT treatment approaches are warranted for advanced disease with increasing doses in combination with other systemic modalities and special surveillance for stage IC.

8022 POSTER

Identifyng Late Side Effects of Pelvic Radiotherapy in Gynaecological Cancers − Experience From a Single Centre in Improving Survivorship From Pelvic Radiation Damage

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Background: In the pursuit of curing gynaecological malignancies with pelvic radiotherapy and brachytherapy, the effects of late bladder and bowel toxicity can have a significant impact on patients long term quality of life.
Method: A retrospective study was undertaken at our centre with the aim of identifyng how many patients had developed new and/or persistent changes in their bladder and bowel habits after pelvic radiotherapy. A questionnaire was developed to identify late changes in bowel and bladder function. If patients answered yes to any of the symptoms, they were then asked how frequent this was. The level of frequency was coded as follows: 0 = never; 1 = less than monthly; 2 = more than weekly to monthly; 3 = every few days to weekly; 4 = daily (at least once a day or more); 5 = constantly. The questionnaire was sent to 109 patients who had completed pelvic radiotherapy with a minimum of 12 months follow up from treatment. Patients who had pre-existing bowel/bladder symptoms were excluded.
Results: 71% (77/109) of patients sent the questionnaire responded. The primary cancers treated were endometrium 57% (44/77), cervix 38% (29/77) and vulva 5% (4/77). 16% (12/77) had no problems after treatment. Of the 84% (65/77) of patients who had experienced changes in their bowel and/or bladder function, this varied from mild effects (e.g. two episodes of cystitis only) to more severe effects (e.g. opening bowels more than ten times in 24 hours). The frequency of patients suffering level 3−5 bowel symptoms was as follows: change in bowel habit 82% (63/77); pain/discomfort 77% (59/77); diarrhoea 60% (46/77); faecal incontinence 51% (39/77); mucus, sticky or slimy faeces 44% (34/77); rectal bleeding 8% (6/77). One patient has been treated for malabsorption. The frequency of level 3−5 bladder symptoms was as follows: urgency 84% (65/77); pain on micturition 78% (60/77); incontinence 50% (39/77) (5/39 wearing pads); recurrent infection 32% (25/77); haematuria 25% (19/77). Four patients had stomas (one colostomy, one urostomy and two had both).
Conclusion: This study has many limitations but recognizes that there is a significant number of patients suffering from late bladder and/or bowel toxicity which is under reported. Unfortunately, many patients have accepted these side effects as inevitable cosequences of their cancer treatment. Many of these symptoms are treatable. More focus during follow up is required to pick up and treat these symptoms. The above results have led us to improve our service in pelvic radiation damage management. A multi-disciplinary team approach led by clinical nurse specialists, involving oncologists, gastro-enterologists and urologists has been developed. Managing lymphoedema and sexual dysfunction have also been incorporated. This service development is being prospectively audited. This study highlights the need to adopt a more focused approach on improving the quality of life and survivorship of patients cured from gynaecological cancers.

8023 POSTER

Comparison of FIGO 1988 and 2008 Classifications For Endometrial Carcinoma

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Background: The objective of this study was to compare FIGO 1988 and 2008 endometrial carcinoma classifications in terms of patient distribution and efficacy in predicting prognosis in patients receiving postoperative radiotherapy (RT).
Material and Methods: Medical records of 351 patients treated between 1994 and 2009 were analyzed. The majority of patients had TAH and BSO and routine lymphadenectomy. Radiotherapy was as vaginal cuff brachytherapy in intermediate risk and risk adapted external beam radiotherapy in high risk patients.
Results: Median follow-up time was 55 months (2.5–133 months). Five year overall (OS) and disease free survival (DFS) for the whole group was 83% and 88%, respectively. Stage migration was observed in 188 (54%) patients. Stage migration did not cause any detrimental effect in OS and DFS except patients who were staged as stage I in 2008 and Stage IIIA in 1988 systems. Stage I patients with positive peritoneal cytology in 2008 system showed 75% 5 year OS and DFS rates which is significantly lower than the other patients with stage I disease. In addition, the survival curves were overlapping for stage IA, IB and II in the new staging. However division of stage IIIC as IIIC1 and IIIC2 significantly affects the prognosis. Patients with stage IIIC2 tumour had 40% OS and 48% DFS rates compared to 69% and 66% in Stage IIIC1 patients ($p = 0.002$).
Conclusions: The major improvement of FIGO 2008 is the subclassification of stage IIIC disease into IIIC1 and IIIC2. The positivity of peritoneal cytology per se seems to have an influence in prognosis in our patients.

8024 POSTER

Prognostic Significance of Human Papillomavirus DNA Finding in Primary Cervical Cancer and Pelvic Lymph Nodes in Cervical Cancer Patients

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Background: Human papillomavirus (HPV) is a crucial etiological factor for cervical cancer (CC) development. Clinical significance of the presence of HPV DNA in the primary tumour and in regional lymph nodes of CC patients is still under discussion. Though the revelation of HPV DNA in non-metastatic lymph nodes can be the early sign of subclinical metastatic regional spread and can be used as a genetic marker of prognosis.
Aims of study: The aims of this study were to evaluate the presence and viral load of HPV DNA in tumour and in regional lymph nodes and their prognostic value in CC patients.
Materials and Methods: 98 patients with invasive CC underwent radical hysterectomy and pelvic lymphadenectomy for stage Ia-IIb (FIGO) cervical cancer at N.N. Petrov Institute of oncology from 2000 to 2007 were included in this survey. A parallel histological evaluation and HPV status determination by polymerase chain reaction (PCR) were carried out in biopsies from the primary tumours and the regional lymph nodes. Cervical tissues of CC were analyzed for HPV DNA presence and viral load by HPV typing and quantification by real-time polymerase chain reaction. These results were compared with well-defined clinicopathological parameters and survival data. Statistical analyses were performed using SPSS. Inferential statistics used for tabular data included Fisher's exact tests, Pearson 2, odds ratios with 95% confidence intervals. All P-values were two-sided. Statistical significance was ascribed to P-values 0.05.
Results: Oncogenic types of HPV in primary tumour were detected in 86 from 98 (87.8%) CC patients. HPV 16 type were found in 82.56% cases, 33 type in 31.37%, 18 type in 24.42% cases. 31? 45 and 58 types were found rarely − in 10.47% for every. In 65 from 98 cases (75.58%) there were detected DNA of several types HPV. HPV presence in iliac lymph nodes was found in 33 from 98 patients. There were no lymph nodes with more than one HPV DNA type. Metastatic lesion of pelvic lymph nodes was found more often patients with HPV one type and low viral load ($p < 0.05$). The correlation between positive HPV DNA test in the lymph nodes and lymph node metastasis was highly significant

($p < 0.005$). Finally, the correlation between disease stage and positive HPV DNA testing in the lymph nodes was also significant ($p < 0.05$). The presence of HPV DNA in cancer free pelvic lymph nodes was significantly correlated to the concomitant manifestation of pelvic lymph node metastases Specificity of the test for detection of metastatic lesion in the pelvic lymph nodes was 95.9% (95% CI: 89−100%), sensitivity was 81.8% (95% CI: 65−93%). The presence of HPV DNA in cancer free pelvic lymph nodes was significantly correlated to the recurrence. Specificity of the test for prognosis of recurrence was 43.6% (95% CI: 28−60%), sensitivity was 79.7% (95% CI: 67−89%).
Conclusion: The presence of HPV DNA in the lymph nodes is probably an early indicator of metastasis and could predict poor prognosis and should be treated as such in the follow up and planning the adjuvant therapy.

8025 POSTER

National Clinical Nursing Database for Patients Who Have Undergone Surgery for Ovarian Cancer

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Background: In 2005 in Denmark a national multidisciplinary evidence-based clinical guideline for fast track ovarian surgury was developed. The goal was to optimize the postoperative outcome of care and treatment for the ovarian cancer patients. The guideline contained recommendations for nursing actions before and after surgery. In 2008 a national audit of nursing data showed inadequate achievement in terms of: nutrition, mobilisation, pain treatment. nausea treatment and the extent of surgical intervention had an impact on hospitalization time.
In 2009 at a national multidisciplinary workshop, four work groups with representives from the largest surgical gynecological cancer departments in Denmark, were established. Three groups were tasked to review the clinical guidelines in nutrition, pain treatment, fluid therapy, respectively, the fourth group was tasked to develop a national clinical nursing database for patients who had undergone surgury for ovarian cancer. The nursing database was connected to the already existing medical database DGCD (Danish Gynecological Cancer Database). Registration was divided into pre, peri, and post operative care and rehabilitation plan. Nursing variables were based on the targets in the national clinical guidelines and based on consensus decisions in the workgroup. From June 2010 the nursing database was tested and continuously adjusted before being implemented in its current form in February 2011.
Results: The nationwide nursing database of patients who have undergone surgury for ovarian cancer is now implemented in Denmark and ensures a systematic documentation of selected nursing variables that support the continuous quality work. The data entry is individually organized to the various departments. Current data material is not large enough to represent a quatily measurement on a given nursing variable. This will be available at the conference in Stockholm September 2011.
Conclusion/Perspective: In 2012 the database is expected to include patients who have undergone surgury for corpus uteri cancer and in future all gynecological cancers.

8026 POSTER

The Optimal Surgical Management of Uterine Leiomyosarcoma − Should Ovaries Be Removed in Premenopausaul Patients?

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Background: Uterine leiomyosarcoma (LMS) is a rare malignant tumour of uterus. The main method of treatment of LMS is surgery. The efficacy of chemotherapy and radiotherapy is questionable. The aim of our study is to establish the optimal extent of surgery for uterine leiomyosarcoma in patients of different age groups.
Methods: A retrospective chart review was done to 198 patients with LMS treated at the N.N. Blokhin Russian Cancer Research Center, Moscow, Russia from 1970 to 2009. Patients with LMS had a median age of diagnosis 48.16 ± 0.7 years. Surgical treatment, as independent method, was performed to 126 patients (63.6%). Combined treatment, including surgery+postoperative chemotherapy or surgery + radiotherapy was performed to 60 patients (30.3%). Complex treatment (surgery + chemotherapy + radiotherapy) was performed to 13 (6.5%) patients.
Results: We observed association between ovarian preservation and improved survival: overall 5 year survival in patients with ovarian preservation and those who underwent oophorectomy is $87.3 \pm 8.4\%$ and $49.0 \pm 5.3\%$, respectively ($p < 0.05$). We didn't observe metastases in ovaries in any of 198 patients included in this study. Furthermore, we observed that in radically treated patients the frequency of distant metastases was 22.2% higher in patients with ovaries removed compared to patients with ovarian preservation during the primary surgery(59.7% and 37.5% respectively) ($p < 0.05$).
Conclusion: According to our data, the optimal surgery for LMS is total abdominal hysterectomy in the reproductive age and total abdominal hysterectomy with bilateral salpingo oophorectomy in the postmenopausal period.

8027 POSTER

Audit of Fertility-sparing Surgery for Early Stage Cervical Cancer

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Background: Carcinoma of the cervix is the second most common cancer in women worldwide after breast cancer, with a peak incidence in females of fertile age. It is important to offer a more conservative approach to surgical management, to minimise the previously accepted adverse effects of radical surgery, and to offer women more than just cure, but also preservation of their fertility. We analyse the oncological results, complications and fertility rates in a group of women who have undergone fertility-sparing surgery for early-stage cervical cancer.
Materials and Methods: From January 2000 to July 2010, 40 radical trachelectomy or radical cone biopsy procedures with pelvic lymphadenectomy were planned.
Results: A total of 40 women were followed up for a median period of 16 months. 21 women (52.5%) underwent a radical trachelectomy. One procedure was abandoned due to extensive disease at the time of surgery. A radical cone biopsy was performed in the remaining 18 women (45%). Three patients (7.5%) had completion treatment (one radical hysterectomy and two chemoradiotherapy) at the time of initial treatment. There was one recurrence among the women who had completion treatment and another recurrence in those who did not. The perioperative complication rate was low (2.5%) and 14 postoperative complications occurred in 10 women (25%). There was no bladder or urethral injury. Three women discovered they were pregnant pre-operatively and two delivered a live birth after a radical cone biopsy. 28 women attempted pregnancy post-operatively. There were eight pregnancies in seven women and four live births. There was one first trimester abortion and three continuing pregnancies.
Conclusions: Radical trachelectomy and radical cone biopsy with pelvic lymphadenectomy are oncologically safe procedures in selected patients with early stage cervical carcinoma. The morbidity is low and it allows fertility preservation.

8028 POSTER

The Post-surgery Symptom Experience of Women With Vulval Neoplasia − Development and Content Validity of a Patient Reported Outcome (PRO) Instrument

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Background: Women with vulval neoplasia (vulval intraepithelial neoplasia and vulval cancer) often experience severe postsurgical complications, but validated instruments for evaluating postsurgical symptoms and related distress are lacking. Therefore the aims of this study were (1) to develop a WOMen with vulvAl Neoplasia − Patient Reported Outcome (WOMAN-PRO) instrument to measure womens' post-vulval-surgery symptom experience, (2) to examine the content validity of the newly developed WOMAN-PRO instrument, (3) to describe modifications based on pilot-testing, and (4) to examine the content validity of the revised instrument (Clinical Trial ID: 01300663).
Methods: In this international, mixed methods multicenter study, a new instrument was developed according to the PRO guidelines, based on literature searches, patient interviews ($n = 20$) and expert feedback ($n = 9$). The 37 items instrument was pilot-tested first with a content validity index (CVI) rating by patients ($n = 6$) and experts ($n = 6$). The revised 36 items were pilot-tested again by patients ($n = 4$). Participants were recruited from one Swiss and two German University Hospitals.