



## Gynaecologic Oncology Abstracts

34<sup>th</sup> National Congress of the South African Society of  
Obstetricians and Gynaecologists

Sun City, Sunday 31 October – Wednesday 3 November 2010

South Afr J Gynaecol Oncol 2010;2(2):73-84

### ORAL PRESENTATIONS

MONDAY 1 NOVEMBER 2010

11:00-12:10: SESSION 6: ENDOMETRIAL CANCER  
(BAOBAB A)

#### 1 ARE WE ANY WISER AFTER ASTEC?

Denny L

Department of Obstetrics and Gynaecology, University of Cape Town  
Correspondence to: Prof Lynette Denny, e-mail: lynette.denny@uct.ac.za

The issue of lymphadenectomy in the management of endometrial cancer has long been dogged by controversy. The data have been confounded by a number of issues such as selection of patients, trial design, use or non-use of adjuvant radiation, clinicians' expertise and access to resources. The ASTEC trials were designed to examine the role of lymph node dissection and adjuvant radiation in women with endometrial cancer. The lymphadenectomy study concluded "that there was no evidence of benefit in terms of overall or recurrence-free survival for pelvic lymphadenectomy in women with early endometrial cancer", and that "pelvic lymphadenectomy cannot be recommended as routine procedure for therapeutic purposes outside of a clinical trial". The ASTEC trials have, however, been extensively criticized, both in terms of trial design and for the fact that mostly low-risk women were randomised to lymphadenectomy and that para-aortic lymphadenectomies were not performed. Subsequent studies have shown a definite survival benefit for women with intermediate- to high-risk endometrial cancer who undergo pelvic and para-aortic lymphadenectomy. Tailoring treatment to individual risk factors is gaining more and more supporting evidence.

#### 2 NEW ASPECTS OF DIAGNOSIS AND PREOPERATIVE WORK-UP

Moodley M

Department of Obstetrics and Gynaecology, Nelson R Mandela School of  
Medicine, University of KwaZulu Natal, Durban  
Correspondence to: Dr Mani Moodley, e-mail: moodley29@ukzn.ac.za

Endometrial cancer is the most common gynaecological malignancy and presents numerous challenges, especially the

appropriate management. New aspects of diagnosis include molecular laboratory techniques. These include determination of protein expression (proteomics) and immunohistochemical analysis of sentinel lymph nodes. The value of CA 125 in the preoperative work-up of a patient with endometrial cancer is controversial. Although standard work-up of patients with these cancers is well described, the role of sophisticated imaging techniques, such as MRI, PET/CT and ultrasound scanning of the pelvis, to determine high-risk factors for extended surgical staging, is not always well defined. These techniques are aimed at node-negative patients who can be spared the adverse effects of radiotherapy.

#### 3 THE ROLE OF HYSTEROSCOPY IN THE DIAGNOSIS OF ENDOMETRIAL CANCER

Thurkow A

#### 4 CHEMOTHERAPY FOR LATE-STAGE ENDOMETRIAL CANCER

Allen D

Mercy Hospital for Women, Melbourne, Australia  
Correspondence to: Prof David Allen, e-mail: dallen@mercy.com.au

*Introduction:* The current literature, practices and trials relating to chemotherapy for late-stage and high-risk endometrial cancer will be presented.

*Methods:* A review of the current literature, practices and trials was performed using data from MEDLINE search, conference proceedings, recent and current trials, and my current practice.

*Results:* Endometrial cancer is the commonest gynaecological cancer but management remains controversial. Conflicting data are found in the literature. The role of lymphadenectomy and the use of radiotherapy and chemotherapy remain controversial. Chemotherapy is more often used for advanced or metastatic disease, but its role in high-risk cancers must also be considered. Distant metastases and recurrences are more common when grade 3, LVSI and certain histologic types are reported. Treatment schedules should include these factors. Portec 3 is a randomised phase III trial comparing concurrent chemoradiation and adjuvant chemotherapy with pelvic radiation alone, in high-risk and advanced stage endometrial carcinoma. The primary study objective is to compare these treatments and establish overall and failure-

free survivals. The secondary study objective is to establish and compare the rates of treatment-related toxicity, quality of life, and pelvic and distant recurrence. The trial will be briefly discussed.

**Conclusions:** It is likely that we will get more conservative for early stage intermediate-risk disease and more aggressive for high-risk disease.

### 12:10: SESSION 7: PELVIC FLOOR IMAGING (BAOBAB B)

## 5 IMAGING IN GYNAECOLOGIC ONCOLOGY FOLLOW-UP

### Howard B

Gynaecological Oncology Unit, Department of Obstetrics and Gynaecology, University of Cape Town/Groote Schuur Hospital

**Correspondence to:** Dr Bruce Howard, e-mail: bhoward@mweb.co.za

Patients with previous gynaecological cancers are followed up by a variety of medical personnel, including gynaecological oncologists, oncologists, general gynaecologists, general practitioners and nursing staff. Early detection of a recurrence is important, in order to refer appropriately and to institute early treatment. All personnel rely on a combination of history, examination and special investigations for the detection of a recurrence. The special investigations include pap smears, blood tests and various forms of imaging. The imaging modalities include X-rays, ultrasound, CT scan, MRI scan, PET/CT scans and nuclear medicine scans. This talk aims to assess the role that each of these imaging modalities play in the follow-up of gynaecological malignancies, while analysing their individual sensitivities and specificities in the detection of recurrences.

### 11:40: SESSION 8: ENDOCRINOLOGY (EAGLE)

## 6 SEX HORMONES AND THE MUSCULOSKELETAL ISSUES

### Neven P, Lintermans A

Multidisciplinary Breast Centre UZ Leuven, Leuven, Belgium

**Correspondence to:** Prof Patrick Neven, e-mail: patrick.neven@uz.kuleuven.ac.be

There are numerous reports on the link between oestrogen deprivation, bone loss and musculoskeletal pain. In 1925, Cecil and Archer already described "menopausal arthritis".

In a female's life, there is no deeper oestrogen deprivation possible than with the long-term use of oral aromatase inhibitors (AIs), commonly given for several years to postmenopausal women with an oestrogen receptor (ER)-positive breast cancer. This affects bone health and may lead to invalidating arthralgia.

Postmenopausal women naturally experience increased bone

loss and are at risk of fractures, which can severely impact their quality of life and impair their ability to cope with the activities of daily life. Any increase in this risk is of importance in evaluating the costs and benefits of AIs in adjuvant therapy over tamoxifen. The benefits of superior disease control associated with AIs and lower incidence of fracture with tamoxifen should be considered with the risk profile for each individual patient. Bone loss and subsequent bone fractures may be avoided by accurately selecting and counselling patients and, if appropriate, treating women at risk for bone loss. Such bone-supportive therapy may also improve breast cancer outcome. The systematic evaluation prior to AI use should include risk factors such as age, smoking history, personal and family history of osteoporosis, history of bone fracture, and history of HRT use. Tamoxifen, which benefits postmenopausal bone, remains an excellent alternative.

The pathogenesis of the frequently encountered "aromatase inhibitor-associated arthralgia syndrome" (AIAA) remains unknown. Because oestrogen can exert a direct antinociceptive effect on the CNS, one may hypothesise that oestrogen deprivation could lead to enhanced pain sensation at a peripheral level. However, the absence of circulating oestrogens at the level of ER in joint tissue may also induce as yet unknown biochemical and pathophysiological changes, leading to debilitating joint pain. It is clear that additional studies are needed to evaluate other mechanisms behind AI-associated arthralgia. Some endocrine disorders may have musculoskeletal manifestations, similar to patients with AIAA. In particular, diabetes mellitus and interference of AIs in the GH-IGF-I axis may present with a variety of associated rheumatic manifestations in the musculoskeletal system, including limited joint mobility, trigger finger and carpal tunnel syndrome. Furthermore, it is our impression that clinical and radiologic findings in the joints of AI users resemble findings seen in the hands of diabetic patients, which shows an increase in fluid and tenosynovial thickness on MRI. However, the exact mechanisms in which endocrine disorders lead to musculoskeletal manifestations need to be further investigated. It may be important for future research to explore common metabolic pathways between diabetes mellitus and AI-associated arthralgia.

### 14:00-15:10: SESSION 12: ONCOLOGY: BREAST CANCER AND CANCER (BAOBAB A)

## 7 SCREENING FOR GYNAECOLOGIC CANCERS

### Denny L

Department of Obstetrics and Gynaecology, University of Cape Town

**Correspondence to:** Prof Lynette Denny, e-mail: lynette.denny@uct.ac.za

Historically, screening for cervical cancer precursors has had a dramatic impact on the incidence of and mortality from cervical cancer in countries that have managed to sustain mass organised screening programmes. The failure to do so

in many developing countries, where the burden of cervical cancer resides, has been addressed in the past 10 years, and a number of new strategies for cervical cancer prevention have been developed. These include screen-and-treat protocols using visual inspection and HPV DNA testing, as well as new technologies, such as liquid-based cytology, and detection of a variety of markers of HPV persistence or integration into the host genome. Screening for other gynaecological cancers has been very successful and ovarian cancer continues to present late and to be associated with high mortality. Large population-based screening programmes for ovarian cancer have been encouraging, with multimodal screening (annual CA 125 with transvaginal ultrasound) having the highest specificity and lower rates of surgery. Screening for endometrial cancer in asymptomatic women does not appear to be cost-effective. Screening for anal intraepithelial cancer, particularly in HIV-positive women with multifocal HPV-associated disease of the anogenital tract, is gaining some evidence.

## 8 CANCER PREVENTION IN WOMEN WHERE BRCA MUTATIONS FEATURE

Dreyer G

Department of Obstetrics and Gynaecology, Gynaecologic Oncology Unit, University of Pretoria, Pretoria, South Africa

Correspondence to: Prof Greta Dreyer, e-mail: gretadreyer@mweb.co.za

**Introduction:** The most important and common hereditary cancer syndrome affecting women worldwide is, undoubtedly, breast/ovarian cancer syndrome. The detection of this syndrome in a family can be empowering, as targeted cancer prevention strategies become available.

**Methods:** A review of the current international literature on BRCA-related risk management was performed. The South African data and clinical environment were reviewed, including published data, available unpublished laboratory data and current management protocols.

**Results:** BRCA testing is affordable and easy in South Africa for patients with Afrikaner or Ashkenazi ancestry, as the mutation patterns for these population groups are known and tests are commercially available. The interpretation and management of genetic test results require expert evaluation of the family history and the person who was tested. The potential impact of available cancer prevention strategies on psychosocial well-being, on cancer risk and, eventually, on survival must be known.

A woman with a mutation has an estimated tenfold increased expected lifetime cancer risk for ovarian and breast cancer. The aim of cancer risk management is the reduction of this risk and the associated morbidity and mortality. Both breast and ovarian cancers are potentially preventable or qualify for early detection through advanced screening. Surgical and hormonal prevention are effective in preventing the disease, but have important economic, psychosocial and clinical implications. Although screening offers less protection (i.e. less improvement in morbidity and mortality) and is costly, it may be more acceptable to some patients.

Patterns of associated malignancies in South African BRCA families are very interesting, and research in this field will continue. Special screening for cancers other than breast,

ovarian and prostate cancers may be warranted, for example, for stomach cancer and, occasionally, colon malignancies.

**Conclusion:** The development of an individualised cancer risk management strategy should include cancer prevention and detection. Age, patient acceptance, cancer fear, body image, relationship and psychological issues and menopausal risks and symptoms should be taken into account. The gynaecologist is ideally placed to manage such a preventive strategy, as cancer screening and hormonal therapy traditionally belong in our discipline.

## 9 NEW MODALITIES FOR BREAST CANCER SCREENING

Neven P, Van Ongeval C, Steyaert L

Multidisciplinary Breast Centre UZ Leuven and Department of Radiology AZ, Leuven, Belgium

Correspondence to: Prof Patrick Neven, e-mail: patrick.neven@uz.kuleuven.ac.be

Any breast cancer screening modality should lead to reduced breast cancer mortality in that population. If not, a screening test is not only inefficacious, but may even harm (false-positive test). Screening film mammography (SFM) reduces mortality and remains the modality of choice. Despite high-quality controlled SFM and experienced radiologists, breast cancers may remain undetected. However, all new screening tests must be compared with SFM for efficacy.

Some promote breast ultrasound (U/S) alone or in combination with SFM. It can detect some of the occult cancers not visible on SFM. U/S, however, suffers from a high false positive rate which may harm an asymptomatic population; it is also operator dependent. Actual data fail to support U/S for population screening.

As a result of the disadvantages of SFM, full field digital mammography (FFDM) was introduced. This allows the use of new approaches for X-ray imaging of the breast, like breast tomosynthesis, dual-energy subtraction mammography and contrast-enhanced digital mammography. Due to better software, breast CT is now investigated and the combination of breast CT or breast tomosynthesis with molecular imaging is being developed; no clinical results are available.

Numerous studies on FFDM suggested the diagnostic accuracy in screening to be at least as good as SFM. The DMIST trial by Pisano, however, could not show a difference between FFDM and SFM, except in pre- and postmenopausal women < 50 years of age with dense breast. This advantage of FFDM over SFM is confirmed in more recent studies, but only with borderline significance. FFDM has a lower dose and is better at detecting ductal carcinoma in situ (DCIS); overdiagnosis is its greatest challenge.

Breast tomosynthesis is an investigational method: a series of low-dose X-ray images is acquired over a range of angles relative to an imaged object. Digital breast tomosynthesis provides the opportunity to view mammographic slices throughout the breast and overcomes the problem of superposition of dense breast tissue over the lesion. From the first studies, tomosynthesis has had comparable or superior image quality to that of SFM in the diagnostic setting of small stellate lesions, and has the

potential to decrease the recall rate.

Contrast-enhanced digital mammography is comparable with MRI but, because of the administration of iodinated contrast material, it will not be useful in a screening setting. MRI of the breast has a high sensitivity but low specificity; it is useful for diagnosis. Recent studies, however, proved a high accuracy in screening patients with genetic risk (BRCA 1- and 2-mutated patients). Careful application of MRI is necessary: the false-positive rate is still high and unnecessary biopsies need to be avoided. Important features of a screening programme with MRI include the following: optimisation of the MRI technique, an awareness of the imaging features of invasive and non-invasive breast cancers detected with MRI, an understanding of its limitations, and the requirement for MRI-guided biopsy. In conclusion, high-quality controlled mammography is the imaging modality with proven accuracy in the early detection of breast cancer. FFDM has the same or better diagnostic accuracy and can be used for population screening. Tomosynthesis is promising, but it is too early to evaluate its accuracy, whereas MRI has proven to be an additional imaging tool in women with a genetic breast cancer risk.

## 10 THE FALLOPIAN TUBE AND CANCER

**Botha H**

Unit for Gynaecological Oncology, Stellenbosch University and Tygerberg Hospital

**Correspondence to:** Dr Hennie Botha, e-mail: mhbotha@sun.ac.za

The concept of serous carcinogenesis arising from the fallopian tube is now becoming clearer. Careful study of the histology of the fallopian tubes of BRCA-positive patients supports the important role of tubal epithelium in the early development of serous epithelial cancers. Gene mutations may be more likely in tubal epithelial cells, and tubal intraepithelial disease, as an early precursor, has been described.

Primary fallopian tube carcinoma is one of the least common cancer diagnoses in gynaecology. Clinical information about this condition is limited, due to fairly small case series; well-researched clinical guidelines are not available. The diagnostic criteria for the diagnosis of a primary fallopian tube cancer dictate that the tumour should arise from the endosalpinx and that the histological pattern should reproduce the epithelium of the tubal mucosa. The transition from benign to malignant epithelium should be present on histology and the ovaries should either be normal, or have smaller volume tumours than the tube. The classic symptoms include a serosanguinous discharge, pain and adnexal mass, but other symptoms may also be present, like bleeding (up to 35%), offensive vaginal discharge and abdominal distension. Imaging and CA 125 may aid in the diagnostic work-up. Staging is according to the FIGO system. Management is similar to that of ovarian carcinoma. Surgical cytoreduction with adjuvant chemotherapy is the preferred treatment, and radiotherapy may play a limited role in selected cases.

## 16:00-16:40: SESSION 14(c): ONCOLOGY (BAOBAB A)

### 11 POSTOPERATIVE COMPLICATIONS IN HIV-INFECTED PATIENTS UNDERGOING RADICAL HYSTERECTOMY FOR EARLY CERVICAL CANCER, AND THE VARIABLES TO PREDICT THESE

**Herbst U**

Department of Obstetrics and Gynaecology, University of Pretoria, Steve Biko Academic Hospital

**Correspondence to:** Dr Unine Herbst, e-mail: unine.herbst@gmail.com

**Background:** Early stage invasive cervical cancer is mostly treated with radical hysterectomy, but there is no literature comparing the outcome and complications of surgery in HIV-positive patients. Postoperative morbidity in HIV-positive patients varies between 10 and 90%. Several markers have been used in an attempt to preoperatively predict the patients with higher risk of adverse outcome, postoperatively.

**Objective:** To determine the incidence of complications in HIV-positive patients compared to HIV-negative patients, and the use of markers to predict them.

**Methods:** Retrospective cohort audit from January 2006 to December 2009 at Steve Biko Academic Hospital.

**Results:** Of the 153 radical hysterectomies performed, only 23 (15%) patients were HIV-positive. The average age was 39.9 years. 43% were stage 1B1 and 83% had squamous carcinoma. Thirteen patients developed 20 (43%) complications, with the most common being urinary tract infection (53%), followed by wound sepsis (17%), vault abscesses (17%), pneumonia (17%) and pulmonary embolism (17%). There were no significant difference in the incidence of complications and duration of hospital stay in HIV-positive patients compared to HIV-negative patients. The HIV-negative group of patients had a higher incidence of secondary wound and sheath closure (36% vs. 8%). In HIV-positive patients that developed complications, the %CD4 count was 17.86% and the WCC  $5.5 \times 10^9/L$ , compared to 23.4% and  $7.2 \times 10^9/L$ , respectively, in those who had no complications. The absolute CD4 count was 400 cells/ $\mu L$ , and none of the patients with an absolute CD4 count less than 200 cells/ $\mu L$  developed complications. HIV-positive patients received more blood products during hospital admission. Viral load and serum albumin levels are not routinely done on our patients.

**Conclusion:** Radical hysterectomy can be done in HIV-positive patients with the same complication rates as HIV-negative patients, provided that the %CD4 count is more than 18%, the WCC is more than  $6 \times 10^9/L$  and the patient has a good general performance status.

### 12 CERVICAL INTRAEPITHELIAL NEOPLASIA IN HIV-POSITIVE WOMEN AFTER EXCISION OF THE TRANSFORMATION ZONE: DOES THE GRADE CHANGE?

**Kabir F**

Leratong Hospital

**Correspondence to:** Dr Ferdousi Kabir, e-mail:

**Objective:** The primary objective of this study was to determine the cytological features of the Pap smear at least six months after definitive treatment LSIL or higher, in women who are HIV-positive. The majority of women had been treated with LLETZ.

**Methods:** The study is a cross-sectional study. Women were referred to the colposcopy clinic at Chris Hani Baragwanath Hospital from surrounding clinics in Soweto with abnormal Pap smears, according to the National Guidelines. The information was retrieved from the colposcopy database for those women who attended the clinic from April 2003 to December 2006. During this time, 1 384 patients attended the clinic and 576 were HIV-positive. Those women who were assessed as having CIN were treated with local excision. The clinic is a "see and treat clinic". The HIV-infected women were offered immediate LLETZ at the initial visit when the colposcopy and/or Pap smear are LGSIL or higher. All women were followed up with Pap smear six to 12 months after treatment. The cytological findings of the follow-up Pap smear were compared to the histology specimen obtained following the LLETZ.

**Results:** The mean age of this sample population was 36.68 years, the mean parity was 2, and the mean CD4 count was 242.7 cells/mm<sup>3</sup>. Forty-five percent of the HIV-positive women were on antiviral treatment. The histology of the cervical specimen obtained by LLETZ or cone biopsy of the HIV-positive patients revealed CIN 1 in 49 (8.5%), CIN 2 in 226 (39%), and CIN 3 in 265 (46%) patients. HPV only was seen in 14 (2.5%), microinvasion in five (0.5%), cervicitis in one (0.17%), and one patient had normal histology.

Three hundred and sixteen patients had a follow-up Pap smear six and 60 months after treatment, and they formed the final study population.

The overall proportion of women who had persistent disease after treatment was 63.9%. Fifty-nine percent (154) of patients with CIN 3 at the initial treatment had follow-up Pap smears. Sixty-nine (44.8%) of these patients improved to a lesser grade and 54 (35%) had normal Pap smears. One hundred and fifty-one patients (67%) with CIN 2 on histology returned for follow up. In 92 (61%) patients, there was an improvement; 29 (19.2%) remained the same. Thirteen patients with CIN 1 returned for follow-up. Eleven (84.6%) of these patients presented with normal Pap smears, and two (15.4%) with CIN 3.

**Conclusion:** The recurrence rate in HIV-infected women after treatment is high, however, most of these recurrences were found to have a lesser degree of CIN as compared to the histology at the initial treatment. Factors associated with having a less severe lesion at recurrence were CD4 cell count, complete excision of the lesion, parity and the use of injectable contraception. The use of HAART was associated with poor response to treatment.

### 13 INTRAOPERATIVE RADIOTHERAPY FOR BREAST CANCER

Apffelstaedt J, Baatjes KJ

Department of Surgery, University of Stellenbosch

Correspondence to: Prof Justus Apffelstaedt, e-mail: jpa@sun.ac.za

**Introduction:** Radiation services are at a premium in developing countries, and prolonged courses of radiation

tax the compliance of women. Single fraction, definitive intraoperative radiation (IORT) for breast cancer is ideal for these circumstances, but is currently reserved for resource-rich environments. From 2001 to 2003, a pilot series of IORT was conducted in a resource-restricted environment, with adaptation of the existing infrastructure. We present the medium-term follow-up data.

**Methods:** After clinically complete tumour excision, a specially developed applicator was introduced into the tumour bed. An existing after-loader with an Ir192 seed was used to deliver 21 Gy in a single fraction to the tumour bed. Then, the applicator was removed and the wound closed. Further regional and systemic oncologic management followed established protocols. Data recorded were age, menstrual status, stage, complications, recurrence and survival.

**Results:** Thirty-nine patients were treated. The average age was 55 years (range: 35-68 years). Fourteen patients had TNM stage 1, 22 stage IIA and 2 stage IIB cancers. The majority of tumours were infiltrating ductal carcinomas. The mean tumour diameter was 19 mm. Four patients were node-positive. After a mean follow-up of 66 months, one patient suffered a local recurrence, three had regional recurrences, and three had systemic metastases. One patient has died of disease and two of unrelated causes, for an overall local control rate of 95%, an overall survival of 90% and a disease-specific survival of 95% at five years.

**Conclusion:** In this limited study, IORT, using existing after-loaders and a self-developed applicator, has similar local control rates at five years as external beam radiation (EBRT). Toxicity of treatment was reduced. Cosmetic outcomes were excellent. Utilisation of a scarce health care resource in a resource-restricted environment is greatly reduced, and barriers to compliance with lengthy radiation protocols removed. IORT is an important step in reducing the physiologic and financial toxicity of breast cancer therapy.

### 14 SURGEON-SCREENING MAMMOGRAPHY: AN ANALYSIS OF 11 948 EXAMINATIONS

Apffelstaedt J, Steenkamp V, Baatjes KJ

Department of Surgery, University of Stellenbosch

Correspondence to: Prof Justus Apffelstaedt, e-mail: jpa@sun.ac.za

**Introduction:** No data exist of the results of screening mammography in Africa. Official data suggest that, in South Africa, breast cancer is not so common as to warrant the effort of mammographic screening. We present the first analysis of screening mammography in Africa. Also, while mammography was pioneered by surgeons, it is now the domain of radiologists. With ever-increasing financial pressures, it must be examined whether interpretation of mammography by clinicians and mammographers is comparable to that of breast radiologists. Our series is the largest of surgeon-read screening mammography to date.

**Methods:** Data on all mammography, performed between 2003 and 2009 at a comprehensive breast centre, were recorded prospectively. State-of-the-art equipment was used; all mammography was performed by dedicated

mammographers. Following a European model, reading was by breast surgeon and mammographer, with consensus established after second reading; the breast surgeon took responsibility for the final reading. Data recorded were: age, hormonal replacement therapy, prior breast surgery, indications for mammography, and outcomes. Outcomes were classified based on BIRADS. Indeterminate lesions were imaged further or underwent tissue acquisition. All BIRADS 5 lesions underwent tissue acquisition.

**Results:** Of 11 948 mammograms, 538 were reported as indeterminate/compatible with malignancy; 240 biopsies were performed and 87 cancers diagnosed. In 40–49 year old women (4 956 mammograms), the recall rate was 4.2%, the biopsy rate was 1.6% and the malignancy rate of biopsy was 23.7%, and the cancer diagnosis rate was 3.6/1000 examinations. For 50– to 69-year-old women, these figures were 6 546, 4.7%, 2.2%, 44.1% and 10.0/1000, respectively. For women older than 70 years, they were 446, 5.6%, 3.4%, 33.3% and 11.2/1000, respectively. Of all cancers, 32.2% were non-invasive. Of the invasive cancers, 49.1% were 10 mm or less in diameter and 75% were node-negative.

**Conclusions:** These results are similar to those in high-quality, organised screening programmes in countries with a high breast cancer incidence, indicating the need for further exploration of a population screening effort in South Africa. Breast screening can be performed with minimal harm done. Breast surgeons can be as accurate in mammography reading as highly specialised breast radiologists.

### 15 PROGNOSIS AND TREATMENT COST OF SCREEN-DETECTED VERSUS SYMPTOM-DETECTED BREAST CANCER IN SOUTH AFRICA

Apffelstaedt J, Baatjes KJ, Groenewald M, Victor L

Department of Surgery, University of Stellenbosch

Correspondence to: Prof Justus Apffelstaedt, e-mail: jpa@sun.ac.za

**Background:** Screen-detected breast cancer (SDBC) has a better prognosis than symptomatic breast cancer (SYBC). There is a paucity of data on prognosis and cost of care impact of the method of detection in resource-restricted countries. We present an estimation of prognostic impact and a detailed cost analysis of the treatment of screen vs. symptom-detected breast cancers as a basis for further exploration.

**Methods:** From a prospective database of a breast health centre in Cape Town, South Africa, 100 consecutive cases, each, of SDBC and SYBC were identified. Staging and pathologic data were analysed and the prognosis of each case estimated with standard protocols. Costs for all components of therapy for each patient were obtained from providers.

**Results:** The mean age of SDBC vs. SYBC was 54 vs. 55 years. SDBC were diagnosed as stage 0 or I in 75% vs. SYBC in 23% of cases, and estimated 10-year recurrence (16 vs. 30%,  $p = 3 \times 10^{-10}$ ) and mortality (7% vs. 19%,  $p = 1 \times 10^{-10}$ ) rates were lower. Surgical and hormonal therapy costs were not different between the two groups (R7 820 219 vs. R7 221 067 and R4 622 701 vs. R5 164 390, respectively). Radiotherapy (R2 980

176 vs. R4 421 620  $p = 0.0024$ ), chemotherapy (R1 674 742 vs. R3 561 479,  $p = 0.001$ ) and biological therapy (R540 408 vs. R 1 531 156,  $p = 0.016$ ) were all significantly lower in SDBC, as was the total average treatment cost (R176 382 vs. R218 997,  $p = 0.0054$ ).

**Conclusion:** Even in a developing country, screening not only leads to the earlier diagnosis of breast cancer with improved survival and decreased recurrence rates, but also concurrent lower treatment costs.

TUESDAY, 2 NOVEMBER 2010

11:00-12:00: SESSION 18: OVARIAN CANCER (BAOBAB A)

### 16 THE USE OF CA 125 IN GYNAECOLOGIC ONCOLOGY

Soeters R

Head: Gynaecological Oncology Unit, Groote Schuur Hospital

Correspondence to: Dr Robbert Soeters, e-mail: robbert.soeters@uct.ac.za

Ever since the first publications in the early eighties, the monoclonal antibody CA 125 has played a prominent role in the management of patients with ovarian cancer.

The promise of CA 125 was enormous. It was thought that ovarian cancer cells uniquely secreted CA 125 and that CA 125 could be used to locate any ovarian cancer cells. This opened many possibilities. One ambition was to link chemotherapy to the monoclonal antibody, and this “magic bullet” would selectively seek out cancer cells and destroy these.

Where initially it was thought that CA 125 was uniquely linked to this disease, it became apparent over time that serum levels were elevated in a number of conditions, both benign and malignant (Table I).

Table I: Conditions in which serum levels CA 125 may be elevated

Benign	Malignant
Cirrhosis	Pancreas
Tuberculosis	Lung
Endometriosis	Breast
Fibroids	Gastrointestinal tract
Pelvic inflammatory disease	Endometrium
Laparotomy	
Pneumonia	
Myocardial infarct	

The place of CA 125 in the active management (i.e. pre- and postoperatively, and during chemotherapy) of ovarian cancer patients has, over time, largely been uncontested. Once when the diagnosis of carcinoma of the ovary has been made and an elevated serum of CA 125 has been established, the active management of the patient depends a great deal on the serum levels of CA 125.

The follow-up (i.e. postactive treatment) of patients with ovarian cancer has traditionally depended on the serum levels of CA 125, in combination with clinical signs and

symptoms, physical examination and radiological imaging. Recently, the place of CA 125 serum levels has become a topic for debate.

### 17 NON-EPITHELIAL OVARIAN CANCER: WHAT MUST THE GYNAECOLOGIST KNOW?

**Guidozzi F**

Department of Obstetrics and Gynaecology, University of the Witwatersrand  
**Correspondence to:** Professor F Guidozzi, e-mail: guidozzif@medicine.wits.ac.za

Nonepithelial ovarian cancer accounts for about 10% of ovarian malignancies. These include germ cell tumours, sex cord-stromal tumours, carcinosarcomas of the ovary, and the rarely encountered small cell and neuroendocrine tumours, squamous carcinoma arising within a dermoid cyst and the malignant struma ovarii. Germ cell tumours are seen primarily in young subjects and represent about 5% of all ovarian neoplasms, but about 80% of preadolescent malignant ovarian tumours. Sex-cord stromal tumours, which can either be oestrogen- or androgen-secreting, account for about 3–5% of ovarian malignancies and, in the majority of cases, are functioning tumours presenting with clinical manifestations such as precocious puberty, abnormal vaginal bleeding or virilisation. The remaining tumours, mentioned above, account for about 1–2% of ovarian malignancies.

Invariably, non-epithelial ovarian tumours present with early stage disease at initial laparotomy. In line with the fact that a significant number of patients are young at the time of their diagnosis, fertility-sparing surgery is an option, although the standard surgical principles of optimal debulking surgery should apply in advanced stage disease, or in patients with recurrent disease. The majority of these tumours are particularly sensitive to chemotherapy, which is recommended as adjuvant therapy for all women with disease beyond stage 1A1.

The presentation will highlight management strategies pertinent to each tumour type.

### 18 WHEN SHOULD INDUCTION CHEMOTHERAPY BE CONSIDERED?

**Allen D**

Mercy Hospital for Women, Melbourne, Australia  
**Correspondence to:** Prof David Allen, e-mail: dallen@mercy.com.au

**Introduction:** The current literature, practices and trials relating to neoadjuvant chemotherapy will be presented.

**Methods:** A review of the current literature, practices and trials was performed using data from Medline search, conference proceedings, recent and current trials, and my current practice.

**Results:** Standard management of ovarian cancer recommends performing debulking surgery as soon as possible in the course of the patient's treatment followed by chemotherapy. The initial studies supporting primary debulking surgery were published in the 1970s. Tumour

biology, extent of surgery, histopathology and non-randomised trials have played confounding roles when assessing outcomes. The concept of primary surgery is now being challenged, and acceptance of neoadjuvant chemotherapy is gaining ground. Preoperative diagnosis, survival and quality of life issues are being studied. Conflicting evidence has been published over the last 15 years. The findings of the CHORUS and EORTC 55971 studies are yet to be published, but are expected soon. These trials will be presented. To date, there is very little good quality evidence to either support or refute the use of neoadjuvant chemotherapy in the treatment of ovarian cancer.

**Conclusions:** Randomised controlled trials are important if we are to make progress and avoid the confusion of the past.

### 19 ASSESSING THE UPPER ABDOMEN IN A PATIENT WITH OVARIAN CANCER

**Herbst U**

Department of Obstetrics and Gynaecology, University of Pretoria, Steve Biko Academic Hospital  
**Correspondence to:** Dr Unine Herbst, e-mail: unine.herbst@gmail.com

Ovarian cancer affects one in seventy women, and is the fourth leading cause of cancer-related mortality amongst women in developed countries. More than 70% of women present with disease that has spread beyond the ovary. Epithelial cancer is the most common variant. Today, different treatment modalities exist. Bristow has shown that optimal debulking with residual tumour less than 1 cm improves outcome. The upper abdomen is cephalad to the greater omentum, and spread is usually transcoelomic. Metastases are seen on the posterior cul de sac, paracolic gutters, right hemidiaphragm, liver capsule, peritoneal surfaces of intestines and their mesenteries, and the omentum.

There is no consensus about the preoperative tests that should be done to determine surgical respectability. Preoperative assessment include CA 125, ultrasound (transabdominal and transvaginal), RMI index, gene expression profiles, CT scan, MRI scan, PET scan, biomarkers, proteomics, and image-guided biopsies. Other markers include CEA, CA 19.9 and CA 15.3. All these modalities have different sensitivity and specificity and cannot always accurately identify non-respectability of disease.

Surgery provides the best method to access the abdominal cavity and respectability. The peritoneal cancer index can be used here. Intraoperative assessment may include diagnostic laparoscopy to determine the extent of the disease before the staging laparotomy. This can be followed by chemotherapy and interval surgery or, primarily, staging laparotomy, which includes peritoneal washings, TAH, BSO, infracolic omentectomy, pelvic and para-aortic lymphadenectomy, diaphragmatic stripping, splenectomy, or bowel resection. Other procedures may also be included during the staging laparotomy. All these procedures are extensive and carry a high morbidity and mortality risk.

**11:40: SESSION 19: GENERAL GYNAECOLOGY  
(BAOBAB B)**

**20 HORMONES AND CANCER**

**Moodley M**

Department of Obstetrics and Gynaecology, Nelson R Mandela School of Medicine, University of KwaZulu Natal, Durban

**Correspondence to:** Dr Mani Moodley e-mail: moodleym29@ukzn.ac.za

Hormones are widely utilised in medicine. Steroid hormones are commonly used in women, either as contraceptive agents or for the treatment of various gynaecological conditions, including cancers. However, the concern has been the link between the use of steroids and development of cancers, notably breast, liver, endometrial and cervical cancers. It is well documented that there are protective effects of hormones against cancers, such as ovarian epithelial cancers. Another well-documented relationship is that of steroid hormones and cervical cancer. Hormones are thought to act as a cofactor with the HPV in degrading the p53 gene product. Hormones are also used as first-line therapy for recurrent receptor-positive endometrial cancer and endometrial stromal sarcoma. Primary treatment with progestogens is effective in about 70% of women with early stage endometrial cancers who wish to preserve their fertility. Hormones may be used for the prevention or treatment of menopausal symptoms for most gynaecological cancers, including low-risk endometrial cancers. In deciding whether to use hormones or not, the benefits and risks need to be considered.

**14:00-15:00: SESSION 24: GESTATIONAL  
TROPHOBLASTIC DISEASE AND NEOPLASIA (GTN)  
(BAOBAB A)**

**21 DIAGNOSTIC PITFALLS IN  
TROPHOBLASTIC DISEASE**

**Makwela R**

Department of Obstetrics and Gynaecology, University of Pretoria, Steve Biko Academic Hospital

**Correspondence to:** Dr Ray Makwela, e-mail: ray.makwela@up.ac.za

Gestational trophoblastic diseases (GTD) are a group of proliferative disorders of trophoblastic cells. These diseases range from premalignant disorders of complete and partial moles, to malignant disorders of invasive mole, choriocarcinoma and the rare placental site trophoblastic tumours. GTDs are characterised by a distinct tumour marker, the beta-subunit of human chorionic gonadotrophin. Improvement in diagnosis, management and follow-up protocols result in overall cure rates that can exceed 98%. Maternal age and history of previous GTD are the two main risk factors. Clinical presentation is, commonly, with abnormal vaginal bleeding in early pregnancy. GTD is suspected when a patient presents with markedly elevated  $\beta$ -HCG and typical

sonographic features. The diagnosis is confirmed on histology. The classic snowstorm appearance of the uterus and theca lutein ovarian cysts may not be apparent in first trimester complete moles. Distinction of a partial mole from a missed or incomplete abortion may also be difficult, with incorrect diagnoses ranging from 15-60% on ultrasound.

Most commercially available assays of HCG fail to detect all forms of  $\beta$ -HCG. This can result in false negative values in patients with cancer. False positive results can occur as a result of cross-reacting heterophile antibodies in the assay. Histological distinction of non-molar miscarriages from partial hydatidiform mole (PHM) can be difficult. Adequate material is required for sampling, since PHM changes may be focal. The presence of amnion or foetal red cells is generally accepted as an exclusion of complete hydatidiform mole (CHM). These have, however, been reported in 1-2% of CHM, possibly as result of twin with CHM.

**22 IDEAL FOLLOW-UP FOR MOLAR  
PREGNANCY**

**Van Der Merwe H**

Unit for Gynaecologic Oncology, Tygerberg Hospital and Stellenbosch University

**Correspondence to:** Dr Haynes van der Merwe, e-mail: haynes@sun.ac.za

Molar pregnancies are the most common form of gestational trophoblastic disease (GTD) and are subdivided in complete (CHM) and partial hydatidiform mole (PHM) based on karyotype, gross morphological appearance and histopathological features.

Suction curettage is the preferred method of treatment for patients still desiring fertility, but hysterectomy is an acceptable option in patients who don't. For most patients, any of the aforementioned would be sufficient treatment. Patients are, however, at risk of developing locally invasive or metastatic postmolar gestational trophoblastic neoplasia (GTN). Patients with CHM are more likely to develop GTN than patients with PHM (13-28% vs 2-4%). Predictors of persistence for CHM include serum HCG > 100 000 mIU/mL, large theca lutein cysts and significant uterine enlargement.

Postevacuation surveillance with serial serum HCG measurement is necessary to diagnose disease persistence, because this group of patients will need further treatment with chemotherapy. Recommended surveillance with serum HCG starts with weekly measurements until it becomes undetectable for three consecutive weeks and, thereafter, monthly for another six to 12 months. Patients in whom HCG spontaneously declined to undetectable levels, and remained so for six to 12 months, are considered to be in remission. During the surveillance period, patients are advised not to conceive and to use reliable contraception.

Non-compliance to HCG surveillance is very common. Reasons include lack of resources, logistical difficulties, patient anxiety and anxiety about delaying pregnancy in older patients. Some researchers investigated the risk of postmolar GTN after HCG spontaneously declined to undetectable levels. In all but one study (including both CHM and PHM), no case of postmolar

GTN was documented once HCG spontaneously declined to undetectable levels. In the only reported case (in a cohort of 96 patients) of postmolar GTN following spontaneous HCG decline to undetectable levels, HCG took more than two months to do so. Subsequent studies showed no postmolar GTN in patients in whom HCG reached undetectable levels within two months of uterine evacuation.

Most authors suggest that HCG follow-up could be shortened and even be discontinued for patients whose HCG has become undetectable within two months of evacuation.

### 23 GESTATIONAL TROPHOBLASTIC NEOPLASIA: NEW PATHOLOGIC INSIGHTS

**Slavik T**

Anatomical Pathologist, Ampath Pathology Laboratories

**Correspondence to:** Dr Tomas Slavik, e-mail: slavikt@ampath.co.za

Gestational trophoblastic neoplasia (GTN) refers to a unique and heterogeneous group of entities demonstrating differentiation towards various components of chorionic villi or gestational trophoblast. At the benign end of the spectrum are variants of hydatiform mole (HM), whilst choriocarcinoma (CC), placental site trophoblastic tumour (PSTT) and the more recently described epithelioid trophoblastic tumour (ETT), a variant of PSTT, comprise the malignant gestational trophoblastic tumours (GTT). The accurate and early pathologic diagnosis of the various forms of GTN has been aided by recent developments in tumour markers, laboratory technology and new insights into our understanding of the different tumour entities, which are discussed. Whilst CC is usually managed with single or multiagent chemotherapy due to its exquisite chemosensitivity, the rarer PSTT and ETT require primary surgical management for optimal outcome. This dichotomous approach to the management of malignant GTT, determined by FIGO stage and an understanding of differing tumour biology based on histology, has ensured an overall survival rate in excess of 80% for this group of tumours.

### 24 CURRENT TREATMENT FOR GESTATIONAL TROPHOBLASTIC NEOPLASIA

**Howard B**

Gynaecological Oncology Unit, Department of Obstetrics and Gynaecology, University of Cape Town/Groote Schuur Hospital

**Correspondence to:** Dr Bruce Howard, e-mail: bhoward@mweb.co.za

Gestational trophoblastic disease consists of two entities:

- Hydatidiform mole: complete or partial.
- Gestational trophoblastic neoplasia (GTN):
  - Persistent/invasive mole
  - Choriocarcinoma
  - PSTT
  - Epithelioid TT

The treatment of GTN depends on a number of factors, including the pathology, FIGO stage and WHO score, and needs to be individualised according to the patient. The mainstay

of therapy for GTN is chemotherapy, either single agent or multiple agents. There is also a role for surgery, depending on the individual pathology and circumstances. This talk will discuss the various treatment modalities available in the management of GTN.

**14:00: SESSION 25: SURGERY  
(BAOBAB B)**

### 25 IS IT TIME TO ABANDON OVARIAN CYSTECTOMY?

**Lindeque G**

Department of Obstetrics and Gynaecology, University of Pretoria, Steve Biko Academic Hospital

**Correspondence to:** Prof BG Lindeque, e-mail: gerhard.lindeque@up.ac.za

Ovarian cystectomy has been performed at high frequency, in recent years mainly by endoscopic surgery. The patient population has largely been young patients in their reproductive years.

Better assessment has led to better understanding of the nature and pathophysiology of ovarian cysts. Ultrasound characteristics have been described that can confidently describe a cyst as benign: simple, unilocular, smooth walled, absence of solid areas and wall growths. In the reproductive years, these are mainly functional cysts that require no treatment or, if painful, hormonal manipulation.

As such cysts are also detected in postmenopausal patients, a simple cyst need not be functional, but the same criteria can be used to describe the cyst as benign. The use of tumour markers can strengthen the diagnosis and allow the cysts to be left alone. Intervention is never without complications. The complications of laparoscopic surgery, in particular, are leading causes of gynaecologic litigation, as well as major suffering for patients. If procedures for the treatment of benign ovarian cysts can be avoided, these factors will decrease in prominence.

**15:00: SESSION 26: ENDOCRINOLOGY  
(ROYAL BALLROOM SOUTH)**

### 26 WHAT TO DO IN THE CANCER PATIENT WHEN HORMONES ARE CONTRAINDICATED

**Neven P**

Multidisciplinary Breast Centre UZ Leuven, Leuven, Belgium

**Correspondence to:** Prof Patrick Neven, e-mail: patrick.neven@uz.kuleuven.ac.be

Sex steroids, to supplement menopausal women with acute symptoms or prevent long term menopausal disorders like osteoporotic fractures, are clearly contraindicated in women with a history of endocrine-sensitive gynaecological cancer; this may stimulate subclinical metastatic disease. This most involves women with breast and endometrial cancer. There is no problem with the use of sex steroids to treat menopausal

symptoms in women with a past history of ovarian cancer. Alternative treatment strategies need to be undertaken, as all these symptoms threaten treatment compliance, especially when women use antioestrogens, like tamoxifen or any of the three oral aromatase inhibitors.

Hot flashes are probably one of the main acute problems which have resulted in numerous publications over the last decade. Newer treatment strategies include the use of clonidine, antidepressants and agents/modalities interfering with neurological transmission, like gabapentine, stellate ganglion block, paced respiration, acupuncture or hypnosis. Progestins are our last choice, with some data on IM-MPA. Sexual dysfunction, urogenital problems and cognitive function have been less intensively investigated, and are not less problematic to treat. The use of localised oestriol against vaginal dryness is probably safe. Aromatase inhibitor-associated arthralgia is now one of the most frequently encountered symptoms in the clinic and current treatment is not effective. Several treatment options have been suggested or are under investigation, but physical activity may overcome joint pains; tamoxifen remains a valuable option if no other treatment works. Bisphosphonates, as treatment of increased bone resorption, mainly with the use of aromatase inhibitors, have been investigated to improve bone mineral density and could also increase disease-free and overall survival. All currently available health measures for the prevention of cardiovascular disease, still the main cause of non-cancer related deaths in our patients, should be considered (lipids and glucose levels, blood pressure, body weight control).

**10:10: SESSION 30: HIV AND OTHER INFECTIONS  
(ROYAL CHAMBER: PALACE)**

**27 CONDYLOMATA ACUMINATA: THE OTHER EPIDEMIC**

**Makwela R**

Department of Obstetrics and Gynaecology, University of Pretoria, Steve Biko Academic Hospital

**Correspondence to:** Dr Ray Makwela, e-mail: ray.makwela@up.ac.za

Anogenital warts (AGW) are the most common viral sexually transmitted disease. AGW are caused by human papilloma virus (HPV) subtypes 6 and 11. Acquisition is related to sexual activity, and is more common in immunocompromised individuals.

Clinical presentation depends on the number and location of the warts. The presentation may vary from asymptomatic to pruritis, bleeding and exophytic growths of varying size. Diagnosis is usually made on clinical inspection. The lesions are skin-coloured or pink, and range from flattened papules to a verrucous papilloform appearance. A background hyperpigmented area of vulva intraepithelial neoplasia is common. Differential diagnosis includes condyloma lata of secondary syphilis and squamous cell carcinoma.

Treatment involves one of three major approaches: chemical/

physical destruction, immunologic therapy or surgical excision. There is no evidence to suggest that one treatment is significantly superior to another. Recurrence rates are high, ranging from 30-70%, usually within six months of treatment. The quadrivalent HPV vaccine is 100% effective in preventing development of AGW in HPV-naïve patients.

**WEDNESDAY, 3 NOVEMBER 2010**

**9:00-10:10: SESSION 31: ONCOLOGIC SURGERY  
(ROYAL BALLROOM NORTH)**

**28 SENTINEL NODES: A FEASIBLE ALTERNATIVE?**

**Snyman L**

Department of Obstetrics and Gynaecology, University of Pretoria, Steve Biko Hospital

**Correspondence to:** Prof Leon Snyman, e-mail: leon.snyman@up.ac.za

Sentinel lymph node dissection (LND) in women with breast cancer without palpable axillary lymph nodes has been well described as a less morbid way of staging the disease. The role of sentinel LND in gynaecological cancers has also been investigated, and is still currently under investigation.

In vulva cancer, radical vulvectomy and inguinofemoral lymphadenectomy is part of the surgical treatment and staging. Sentinel node biopsy is under investigation as an alternative to inguinofemoral LND. Theoretically, this option will result in less morbidity without increasing the risk of metastases. The data on published research will be reviewed, as well as the cases which are most likely to benefit from sentinel LND.

Sentinel lymph nodes in other gynaecological cancers have also been investigated, and the published literature regarding the different cancers will be discussed.

**29 CONTRIBUTION OF TRACHELECTOMY**

**Dreyer G**

Department of Obstetrics and Gynaecology, Gynaecologic Oncology Unit, University of Pretoria

**Correspondence to:** Prof Greta Dreyer, e-mail: gretadreyer@mweb.co.za

**Introduction:** Trachelectomy and radical trachelectomy are terms used for the vaginal or abdominal removal of the uterine cervix, with or without the paracervical ligaments. It is done alone or in combination with pelvic lymph node dissection. The procedure is indicated for early-stage cervical cancer in patients who desires to retain the uterus and child-bearing potential.

**Methods:** The current literature on trachelectomy and radical trachelectomy was reviewed, and the reported pregnancy- and cancer-related outcomes were reviewed, in combination with available unpublished local data.

**Results:** Trachelectomy was conceptualised to retain safe and radical surgical resection of malignancy, without the resection of healthy and wanted tissue. In order to consider the new

procedure an advance in surgical technique, the safety and survival data of classical treatment for comparable disease may not be compromised. The value of this procedure includes contributions to the field of cancer surgery and treatment, as well as to the physical and psychosocial health of the individual cancer survivor.

Trachelectomy data supported the safety of modifications to the technique of radical hysterectomy for smaller tumours. In addition, the advent of this treatment necessitated the development of laparoscopic node dissection and retroperitoneal dissection, and so contributed largely to the development of surgical skill with these techniques. Radical trachelectomy surgeons also rediscovered the Schauta vaginal radical hysterectomy operation, and made it possible for many patients to have laparoscopic/vaginal surgery for cervical malignancies. This development also led to renewed interest and belief in the possibility and safety of laparoscopic radical surgery.

For the young woman diagnosed with cervical cancer, the possibility to retain her uterus may be a huge contribution to holistic health. It may be the important determinant of a complete self-image and sexual image, of having a partner and having her own children. These aspects of psychosocial outcome have not been studied comprehensively in patients after trachelectomy. The available data on pregnancy outcome and ultimate safety of the procedure will be shown.

**Conclusions:** This new method to treat early cervical cancer should be embraced and offered to suitable patients. The strict indications for the procedure and high standards in surgical skill and training must be retained.

### 30 LAPAROSCOPIC MANAGEMENT OF OVARIAN MASSES

Mangeshikar P

### 31 CAN OVARIAN CANCER BE REMOVED COMPLETELY?

Mouton A

Department of Obstetrics and Gynaecology, Gynaecologic Oncology Unit, University of Pretoria

**Correspondence to:** Dr Arrie Mouton, e-mail: rika.byleveldt@up.ac.za

**Introduction:** Surgical cytoreduction is the cornerstone of current treatment in patients with advanced disease, but it offers the best chances for overall survival when optimal cytoreduction is achieved. Consensus has not been reached on the clinical, pathological and radiological investigations needed to predict optimal respectability of disease.

**Objective:** Different oncology units use different baseline investigations to determine, preoperatively, if the cancer is optimally respectable. These results influence decisions on primary cytoreduction, and chemotherapy and interval debulking.

**Results:** Studies analysing the role of the optimal cytoreduction that can be achieved differ in the sensitivity, specificity, accuracy and predictive values of predictive parameters

described. The studies included cancer antigen 125 and radiological imaging modalities, as well as laparoscopic-based reports of ovarian cancer respectability.

**Conclusion:** The rates of optimal cytoreduction vary amongst oncology units, as well as between surgeons within the same unit. A universally applicable clinical model that can predict which patient will be optimally cytoreduced remains elusive.

## 10:00 SESSION 33: ADOLESCENT GYNAECOLOGY (EAGLE)

### 32 HPV VACCINE UPDATE

Smith T

Department of Obstetrics and Gynaecology, University of the Witwatersrand

The global burden of cervical disease and cancer is substantial and HPV infection is common. Approximately 50% of infected individuals fail to produce an antibody response to a naturally acquired infection. Prophylactic HPV vaccines have been developed to type 16 and 18 (the two commonest cervical cancer types) and type 6 and 11 (the two types causing genital warts). Cervarix<sup>®</sup> incorporates type 16 and 18 with the adjuvant system AS04 and has been shown to demonstrate efficacy for up to 6.4 years against CIN 2 + HPV type 16/18 lesions. There have been no breakthrough cases of infection in 7.3 years. There are also cross-protection data on type 31, 33 and 45, amongst other HPV types. Gardasil<sup>®</sup> utilises the aluminium salt adjuvant and contains four types of HPV, namely 6, 11, 16 and 18. Serum antibody levels to HPV 16 remain high at five years, but HPV 18 drops to similar levels to those following natural infection 18 months after vaccination. Despite this decline in antibody levels, there appears to be a 98% efficacy for up to 3.6 years against HPV 6/11/16 and 18 CIN 2/3, VIN, AIS and genital warts. There are also cross-protection data on type 31 CIN 2 + disease and other HPV types. Modelling studies predict that high antibody responses will be sustained for decades, but the actual duration of protection will only be established by long-term efficacy studies. Despite this, the uptake has been poor and availability to vulnerable populations is limited.

## POSTER PRESENTATIONS

### 1 LOCALLY AGGRESSIVE UTERINE PECOMA WITH EARLY HAEMATogenous METASTASIS

<sup>a</sup>Mathonsi N, <sup>a</sup>Makwela R, <sup>b</sup>Marais E, <sup>a</sup>Dreyer G

<sup>a</sup>Department of Obstetrics and Gynaecology, <sup>b</sup>Department Anatomical Pathology, University of Pretoria

**Introduction:** Perivascular epithelioid cell neoplasms (PEComa) form a growing family of tumours with no single known normal tissue cell variant. All these tumours are uncommon and the large majority benign. Uterine PEComas are very rare and only five metastatic cases were found on our MEDLINE search.

**Clinical case:** We report a case of uterine PEComa which was locally aggressive and invasive. In addition, the tumour recurred and metastasised within three months of excision. The patient is currently undergoing systemic chemotherapy and we are considering hormonal therapy as an ongoing adjuvant.

**Histology:** Histology revealed some of the features of malignancy, and special immunohistochemical staining confirmed tumour classification. The tumour was strongly positive for Actin and HMB-45.

Because of tumour behaviour, the dilemma of systemic therapy and the origin of the tumour, we performed sex hormone receptor analysis. We detected strong oestrogen receptor positivity and also progestogen receptor positivity.

**Conclusion:** We postulate that this finding opens the door for future investigation into hormonal treatment of similar tumours. This is the first report of oestrogen- and progestogen-receptor positivity in this very rare malignant neoplasm.

### 2 RETROSPECTIVE REVIEW OF 187 WOMEN TREATED FOR CARCINOSARCOMA BETWEEN 1970 AND 2008 AT GROOTE SCHUUR HOSPITAL, CAPE TOWN, SOUTH AFRICA

Mbatani N, Van Wijk L, Soeters R, Denny L

Department of Gynaecology and Obstetrics, Groote Schuur Hospital

**Background:** Carcinosarcoma is a rare uterine cancer with a poor prognosis. Management is controversial and usually involves surgery. Additional radiation and/or chemotherapy are of uncertain benefit. The study was undertaken to document the outcome of treatment of carcinosarcoma, comparing the different treatment approaches used at our institution during the period under review.

**Methods:** The records of 186 women treated between 1970 and 2008 were retrieved and analysed for demographic data, pathology, treatment modalities and survival.

**Results:** The median age was 67 years (range 31–86 years). The stage distribution was 68 (36.4%) for stage I, 29 (15.5%) for stage II, 58 (31%) for stage III and 32 patients (17.1%) for stage IV. Forty-six women did not undergo surgery (advanced

disease in 33, medically inoperable in six, and no reason found in seven patients). Of the 33 patients with advanced disease, 15 received pelvic radiotherapy only and 18 were treated symptomatically. The mean survival for these patients was 9.8 and 3.9 months, respectively.

One hundred and forty women underwent standard surgery in the form of hysterectomy and bilateral salpingo-oophorectomy. Of these patients, 83 were found to have stage I and II. There was no apparent benefit when surgery alone was compared with surgery followed by adjuvant treatment with radiotherapy and/or chemotherapy, either in overall survival or disease-free interval.

**Conclusion:** From our data, we could find no evidence of a survival benefit with the addition of adjuvant treatment after surgery for early stage carcinosarcoma. Radiotherapy can palliate symptoms in advanced disease.