Dear Readers

This May issue of AORTIC news comes jammed packed with interesting scientific articles which will allow you enough reading fodder to last you quite a while. My heartfelt thanks to all those that sent in their contributions! Please continue sending in your articles for the next issue...

The dates have been set for the next AORTIC International Cancer Conference. The 6th International Cancer conference will be held in Cape Town, South Africa, from 25—28 October 2007. Mark your calendar now! See announcement on page 4.

In this issue we are also offering you a chance to win a copy of “Cancer Medicine”. See details on this page on how you can enter this competition.

We strive to keep the website informative and updated, if you have any suggestions please email us: aortic@telkomsa.net

Signing off

B Rodrigues

Belmira Rodrigues

9 Volumes of Cancer Medicine to be won!

9 Lucky readers can win a copy of the prestigious oncology book “Cancer Medicine”. All you need to do is answer the simple question below:

Question: When and where will the next AORTIC International Cancer conference take place?

E-mail your answer to aortic@telkomsa.net before August 1st 2006.
Directory of Grants and Fellowships in the Global Health Sciences

2006 Directory of Grants and Fellowships in the Global Health Sciences (NIH Publication 06-3027) is now completed and available. It includes nearly 500 funding opportunities related to biomedical and behavioral sciences, with a special emphasis on researchers in the developing world and their collaborators. An addendum listing 100 grants specifically for short-term travel and exchange is also available.

Please visit:

Please contact Hannah Leslie (leslieha@mail.nih.gov) with questions, comments or corrections.

Pretoria Palliative Care

presents the

4th Multidisciplinary International Palliative Care Conference

22nd and 23rd September 2006

at the

CSIR Conference Centre, Pretoria, South Africa

Meiring Naude Road, Brummeria, Pretoria

For more information please contact Noreen Napper

Mobile: 082 759 8751
HOSPICE UGANDA TRAINING COURSES

Hospice trainings are designed to help health care providers, allied professionals and communities (community workers, spiritual advisors, Traditional Healers) to play their respective roles in palliative care provision for patients living with life-threatening illnesses like HIV/AIDS and Cancer, and their families.

Their training is open
- to those working in care and support service and training organisations/institutions who will put to practice knowledge and skills acquired and
- whose organisations are committed to supporting, implementing and/or developing palliative care services

Participants are welcomed from
- public sector
- not for profit sector i.e. NGOs, INGOs, Faith organisations, CSO
- private sector
- Associations
- Networking organisations involved in service delivery

Bladder cancer in Africa: update

el-Mawla NG, el-Bolkainy MN, Khaled HM.

Department of Medical Oncology, National Cancer Institute, Cairo, Egypt.

Carcinoma of the bladder is the most prevalent cancer in Egypt and in most African countries. At the National Cancer Institute (NCI), Cairo, it constitutes 30.3% of all cancers. The median age at diagnosis is 46 years, with a male preponderance of 5:1. Whether in Egypt or other African countries such as Sudan, Kenya, Uganda, Gold Coast, and Senegal, it is mostly of the squamous cell type, and arises in a background of schistosomiasis or bilharziasis. Tumors are usually advanced at the time of presentation. Bladder carcinogenesis is probably related to bacterial and human papilloma virus (HPV) infections, usually associated with bilharzial infestation. Management is mainly surgery, with 5-year survival rates after radical cystectomy increasing from 35% in the 1970s to 48% in the 1990s. The addition of adjuvant and neoadjuvant radiotherapy and chemotherapy to surgery since 1976 significantly improved both disease-free and overall survival rates. Molecular genetic studies concerning potential prognostic markers, tumorigenesis, and tumor progression in bilharzial bladder cancer are limited. However, a comprehensive detailed analysis of these factors is underway. Bilharzial bladder cancer is a preventable malignant disease. Primary prevention could be possible if the parasite is eliminated nationwide. Chemoprevention using retinoids or cyclooxygenase 2 (COX-2) inhibitors is a possible alternative. Semin Oncol 28:174-178.

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AORTIC’s 6TH INTERNATIONAL CANCER CONFERENCE IN SOUTH AFRICA!

To be held at the President Hotel, in Cape Town, South Africa from 25—28 OCTOBER 2007

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HPV Vaccines – the dawn of a new era

Lynette Denny

Cervical cancer is the most commonest cause of death in women in Sub-Saharan Africa, Melanesia, South Central and South East Asia, the Caribbean and Latin America. In the year 2002, it was estimated that 493 000 new cases of cervical cancer were diagnosed globally and 274 000 women died in that year. Some 83% of the cases occurred in developing countries where cervical cancer accounts for 15% of all cancers compared to 3.6% in developed countries. In addition, developing countries are known to have access to less than 5% of global cancer resources.

Yet, it is well known that cervical cancer is a largely preventable disease. There is now consensus that infection of the cervix with certain high risk types of human papillomavirus (HPV), particularly HPV types 16 and 18, are a necessary, if not sufficient cause for the development of cervical cancer. The current understanding of the natural history of cervical cancer is that persistent infection of the cervix with high risk types of HPV results in the integration of the virus into the host genome. Once this occurs, malignant transformation of the cell becomes possible. This is initially expressed as precancerous lesions of the cervix, known as squamous intra-epithelial lesions (SIL) or cervical intraepithelial neoplasia (CIN). These lesions are entirely asymptomatic and can be detected with the Papanicolaou or cervical smear. Traditionally, once precancerous lesions are detected, women are referred for a colposcopic examination. At colposcopy, during which the cervix is illuminated and magnified and examined after the application of 5% acetic acid, the presence of an intraepithelial lesion is confirmed and a biopsy taken for histological confirmation. Thereafter the lesion may be removed either by excision or ablation. This approach to cervical cancer prevention has been very successful in many countries, resulting in a dramatic reduction in the incidence of the disease.

Unfortunately however this approach to cervical cancer prevention, known as secondary prevention, has not been successful in any developing countries in the world due to the complexity of the infrastructure required to make this approach work and the substantial human, financial and logistical resources required. Consequently cervical cancer prevention efforts in developing countries either do not exist or they are extremely limited.

In the past 10 years or so there have been many attempts to develop alternative, technologically more appropriate approaches to cervical cancer prevention in poor countries. Of particular relevance here are the visual inspection methods that allow for women to be screened and treated in a single visit which was discussed in our Newsletter Issues 2 & 3. (Available on our website: www.aortic.org (Africa site).

Continued on next page ...
HPV Vaccines – the dawn of a new era (Cont.)
Lynette Denny

An alternative approach to cervical cancer would be primary prevention. Primary prevention of cervical cancer would involve preventing HPV infection in the first place or at least preventing persistent infection with HPV. As the primary method for the transmission of genital HPV is via sexual intercourse, possible methods of primary prevention include abstinence (not likely in any part of the world!!), mutual monogamy and condoms. While condoms do seem to have some protective effect against HPV infection, it is nowhere near as effective as preventing HIV and therefore is not a reliable method of primary prevention. Another potentially very powerful method of primary prevention is vaccination against cancer-associated types of HPV.

The recent publication of a number of randomised placebo-controlled trials of three different HPV vaccines has brought new hope and energy to the fight against cervical cancer. The first trial was published by Koutsky et al who randomly assigned 2392 women aged 16 – 23 years to receive three doses of HPV-16 virus like particle (VLP) vaccine or placebo given at day 0, month 2 and month 6. After a follow up period of a mean of 17.4 months the incidence of persistent HPV 16 infection was 0 per 100 woman-years at risk in the vaccinated group (i.e 100% efficacy) compared to 3.8 per 100 woman years at risk in the placebo group. In addition, the vaccine was shown to be safe and well-tolerated. 1

In 2004, Harper et al published a paper on a randomized trial of 1113 women aged 15 – 25 years who were vaccinated either with the vaccine or placebo at day 0, month 1 or 6 months in North America and Brazil 2. Vaccine efficacy was 91.6% against incident infection and 100% against persistent infection with HPV16/18. These same authors have just published follow up data on this cohort at 4.5 years since vaccination 3. They showed that in 98% of cases the sero-positivity rate for antibodies to HPV 16 and 18 were maintained during the follow-up phase. Vaccine efficacy against the following endpoints were;

- Incident infection - 96.9%
- Persistent infection (defined as over 12 months) - 100%
- Protection against cervical intra-epithelial lesions - 100%

This bivalent vaccine was developed by GlaxoSmithKline (GSK) Biologicals Rixensart, Belgium and the company has indicated that it will seek approval of the vaccine in Europe and other countries in 2006.

Continued on next page ...
HPV Vaccines – the dawn of a new era (Cont.)

Lynette Denny

Merck & Co. of Rahway, New Jersey have developed a quadrivalent vaccine that has efficacy against types 6 and 11 (which cause genital warts and are not associated with cancer) and types 16 and 18. Villa et al published data on 277 women who were vaccinated at day 0, month 2 and month 6 compared to 275 women (mean age of both groups 20 years) who received placebo. Both groups were followed up for 36 months. The primary endpoint of the study was the combined incidence of infection with HPV 6, 11, 16, or 18 or cervical or external genital disease such as persistent HPV infection, HPV detection at the last recorded visit, CIN/SIL, cervical cancer or external genital lesions. This study found that the combined incidence of persistent infection or disease with HPV 6, 11, 16 or 18 fell by 90% in the vaccinated group! Merck have indicated that they will apply for FDA approval of the vaccine in 2006.

These remarkable data conducted in rigorous and scientifically sound trials provide real hope that cervical cancer can be substantially reduced in the world. But as usual there are many complex issues around this exciting new technology. Firstly, the vaccines have been developed at the cost of billions of dollars and clearly the companies that have developed the vaccines will want to recoup costs. In fact, the cost of the vaccines has not been disclosed but is likely to be way out of the reach of developing countries. It is imperative that we in Africa begin thinking of creative ways to bring this vaccine to our people.

In addition to the costs involved, the vaccine requires a cold chain and three intra-muscular injections, all of which increase the costs and logistical difficulties in administering the vaccines. Further, the ideal population to vaccinate are young girls prior to sexual debut or exposure to HPV. Very few developing countries have adolescent or pre-adolescent vaccine programmes and this would require a new infrastructure. Long-term duration of protection from the vaccine is not yet known and whether booster doses will be required is yet to be established. It is well established from large epidemiological studies that HPV is largely sexually transmitted and this being the case there may be a lot of resistance and stigmatization around this issue. However, it is important for clinicians, patients and their parents, and the general community to understand that this vaccine has been designed to prevent a very devastating and lethal cancer. Stigmatising the vaccine because of issues around the sexual transmission of HPV is unhelpful in the global fight against cancer.

Continued on next page ...
Ultimately, governments in poor countries will have to make choices as to where to put their limited resources. The population of health professionals who work with vaccination in general are paediatricians and primary health care workers who may not appreciate the extent and the suffering caused by cervical cancer, which affects women in their 40s and 50s. Conversely, physicians and primary care workers who deal with cervical cancer and its prevention do not traditionally work with vaccination!! So whole new communities will have to begin to interact with one another.

While the many complex issues around the HPV vaccines are being resolved, it is imperative to continue efforts to bring secondary prevention methods for the prevention of cervical cancer to women in poor countries. Cervical cancer is a very apt example of the gross inequities of access to health care in the world and the terrible consequences these have for poor women.

References:
3. Harper et al. *Sustained efficacy up to 4.5 years of a bivalent L1 virus-like particle vaccine against human papillomavirus types 16 and 18: follow up from a randomized control trial.* (Lancet 2006 April 6) 1–9

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**HPV Vaccines – the dawn of a new era (Cont.)**

Lynette Denny

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**XVIII FIGO World Congress of Gynecology and Obstetrics**

Kuala Lumpur, Malaysia—5 – 10 November 2006

*Details:* AOS Conventions & Events, 39 & 40 Jalan Mamanda 9, Ampang Point, 68000 Ampang, Kuala Lumpur, Malaysia

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SWAZILAND CANCER REGISTRY, 1996-1999

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BACKGROUND INFORMATION

Swaziland covers an area of 17,364 square kilometers. It extends on 192km from North to South, and 144km from West to East at its widest points. The country is divided in four geographic regions, i.e. the Highveld, the Middleveld, the Lowvield and the Lubombo. Lubombo, which is a mountainous region, divides the country from Mozambique in the East. The North, South and West are bounded by South Africa.

Climatically, rainfall and temperature vary between different regions with the Lowvield experiencing generally much higher summer temperature of @ 40°C. Farming activities and population are closely related to the altitude. Naturally, the variety of climate affects both plants and animal life and accounts, to some extend, to the disease patterns in the country.

OBJECTIVES

The first cancer registration was done as part of a large research project to investigate the relationships between aflatoxin contamination of foodstuffs, hepatitis B virus and primary liver cancer1.

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More than one decade later, the present cancer registration is conducted in order to:

- obtain information on patterns of the cancer disease, particularly in relation to the emerging pandemic of AIDS and to a population which is increasingly urbanized and adopting western lifestyle;
- examining changes in the incidences and patterns since the previous study in order to evaluate the activities of the national aflatoxin control programme;
- provide clues to the causes of cancer in population with view to the prevention.

Here, we report data from the first population-based cancer registration, which covered 1996-1999 period of time.

MATERIALS AND METHODS

The population data was obtained from Central Statistic Office during 1997 census . It is estimated at 929,718 inhabitants with 498,564 females and 440,154 males; the crude rate of natural increase of the population being 2.7%.

The cases registered in this period include cancers diagnosed clinically, by means of clinical investigations, cytology, histology or death certificates. They were collected throughout the country from government, missions and private hospitals, clinics and health centers.

Data are analyzed according to statistical methods for cancer registries. Age-standardization of incidence rates was carried out by the direct method, using the world standard population.

RESULTS

A total of 2900 cancer cases were registered (1293 males and 1607 females) in the four-year period. Tables I and II display annual incidence per 100,000 by age groups (in years) respectively for females and males, while Table III and Graph 1 show different rates by sites in both genders. Pies I and II highlight the four most common cancers in males and females respectively.

It is difficult to make comparisons between both studies because of the differences in case ascertainment. But generally speaking, there is an increase in cancers that are associated with HIV infection, tobacco or alcohol consumption, poor sanitation and/or low socio-economic conditions. Many of the changes reflect the epidemic of AIDS, which is severe in Swaziland: prevalence of HIV infection in adults was estimated to be 25.3% at the end of 1999, 33.4% at the end of 2001, and 42.5% currently.

Thus, the frequency of Kaposi’s sarcoma has increased enormously to reach 16.8% of all cancers in males (ASIR 17.2 per 100,000) and 10.4% in females (ASIR 9.5 per 100,000).

In males, the incidence of liver cancer is high (ASIR 22.0) and so is that of prostate cancer (ASIR 21.5%) and cancer of the esophagus (ASIR 14.0). This shows clearly that the Aflatoxine Control Programme as well as Swaziland Action Against Alcohol, Cigarette and Drug Abuse have not achieved their objectives.

Continued on next page ...
In females, the picture is dominated by the extraordinary high rate of cervix cancer:
41.7% of all cancer (ASIR 59.3%).
Breast cancer is much less common: 8.9% (ASIR 12.9).
Liver and esophageal cancers are considerably less frequent than in males (M:F ratio are in the range 3-4:1).
In childhood, the principal cancer recorded was Burkitt’s lymphoma (ASIR 7.6 per million). There were seven cases of Kaposi’s sarcoma (7.5 %, ASIR 4.4 per million).

DISCUSSION AND RECOMMENDATIONS

It is striking to observe that more than 70% of cancers in Swaziland in both sex are related to well known risk factors and are, therefore, are amenable to intervention at the primary prevention level. The control of HIV infection is an obvious step in reducing the incidence of AIDS-defined cancers, e.g. Kaposi sarcoma, cervical cancer, non-Hodgkin lymphoma and Hodgkin lymphoma. A reduction in the consumption of cigarette and alcohol is another obvious step in decreasing the incidence of alcoholism and smoking-related malignancies, e.g. upper digestive, respiratory and urinary tract malignancies. The reduction of food contamination with aflatoxin and control of infection with HBV are important steps in decreasing the incidence of hepatocellular carcinoma. Screening programs or, at least, early detection by non-invasive diagnostic methods, will reduce the morbidity and mortality due to many other cancers, e.g. cervical, breast and prostatic cancers.

It is strongly recommended that in the country:

- an international scientific, technique or otherwise collaboration be established in order to tackle the most common cancers, based on the knowledge of their risk factors;
- a national cancer control programme be set up in order to screen, detect and treat, at early stage, the most common cancers;
- the national population-based cancer registry be strengthened and enabled to evaluate the progress made by the national cancer control programme.

REFERENCES


DIAGRAMS on next page
SWAZILAND CANCER REGISTRY, 1996-1999 (Cont.)

Graph 1.

Swaziland (1996-1999), All sites

Pie Chart 1

Swaziland (1996-1999)-Male (All ages)
1145 cases

- Kaposi sarcoma: 157 (13.7%)
- Liver: 172 (15.0%)
- Prostate: 140 (12.2%)
- Oesophagus: 105 (9.2%)
- Other cancers: 570 (49.8%)

Continued on next page ...
Fig. 1.

Swaasiland (1996-1999)

Cancer in Africa
<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>1234</td>
<td>5678</td>
<td>9012</td>
<td>3456</td>
</tr>
<tr>
<td>1991</td>
<td>4567</td>
<td>8901</td>
<td>2345</td>
<td>1234</td>
</tr>
<tr>
<td>1992</td>
<td>5678</td>
<td>9012</td>
<td>3456</td>
<td>1234</td>
</tr>
<tr>
<td>1993</td>
<td>6789</td>
<td>1234</td>
<td>4567</td>
<td>8901</td>
</tr>
<tr>
<td>1994</td>
<td>7890</td>
<td>1234</td>
<td>4567</td>
<td>8901</td>
</tr>
<tr>
<td>1995</td>
<td>8901</td>
<td>1234</td>
<td>4567</td>
<td>8901</td>
</tr>
<tr>
<td>1996</td>
<td>9012</td>
<td>1234</td>
<td>4567</td>
<td>8901</td>
</tr>
</tbody>
</table>

**Annual Incidence per 100,000**

Switzerland (1990-1999)
<table>
<thead>
<tr>
<th>SITE</th>
<th>Male</th>
<th>Freq (%)</th>
<th>Crude rate per 100,000</th>
<th>ASR world</th>
<th>Cum. D:64 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mouth</td>
<td>18</td>
<td>1.4</td>
<td>1</td>
<td>2.2</td>
<td>0.15</td>
</tr>
<tr>
<td>Salivary glands</td>
<td>2</td>
<td>0.2</td>
<td>0.1</td>
<td>0.3</td>
<td>0.03</td>
</tr>
<tr>
<td>Nasopharynx</td>
<td>2</td>
<td>0.2</td>
<td>0.1</td>
<td>0.2</td>
<td>0.02</td>
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<tr>
<td>Other pharynx</td>
<td>24</td>
<td>1.9</td>
<td>1.4</td>
<td>3.0</td>
<td>0.26</td>
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<tr>
<td>Oesophagus</td>
<td>113</td>
<td>9.1</td>
<td>6.4</td>
<td>14.4</td>
<td>1.01</td>
</tr>
<tr>
<td>Stomach</td>
<td>36</td>
<td>2.9</td>
<td>2.2</td>
<td>4.5</td>
<td>0.29</td>
</tr>
<tr>
<td>Colon</td>
<td>27</td>
<td>2.2</td>
<td>1.5</td>
<td>2.8</td>
<td>0.14</td>
</tr>
<tr>
<td>Rectum</td>
<td>12</td>
<td>1.0</td>
<td>0.7</td>
<td>1.3</td>
<td>0.08</td>
</tr>
<tr>
<td>Liver</td>
<td>193</td>
<td>15.5</td>
<td>11.2</td>
<td>22.2</td>
<td>1.65</td>
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<tr>
<td>Gallbladder</td>
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<td>0.1</td>
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<td>Pancreas</td>
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<td>1.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Larynx</td>
<td>37</td>
<td>3.0</td>
<td>2.1</td>
<td>4.5</td>
<td>0.29</td>
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<td>Trachea, bronchus and lung</td>
<td>81</td>
<td>6.5</td>
<td>4.6</td>
<td>10.1</td>
<td>0.68</td>
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<tr>
<td>Bone</td>
<td>20</td>
<td>1.6</td>
<td>1.1</td>
<td>2.0</td>
<td>0.13</td>
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<tr>
<td>Malignancy of skin</td>
<td>6</td>
<td>0.5</td>
<td>0.3</td>
<td>0.6</td>
<td>0.04</td>
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<td>Other skin</td>
<td>46</td>
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<td>2.6</td>
<td>5.5</td>
<td>0.39</td>
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<td>Mesothelioma</td>
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<td>0.1</td>
<td>0.3</td>
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<td>Kaposi sarcoma</td>
<td>209</td>
<td>16.8</td>
<td>11.9</td>
<td>17.2</td>
<td>1.37</td>
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<td>Peripheral nerves</td>
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<td>0.1</td>
<td>0.1</td>
<td>0.01</td>
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<td>Connective and soft tissue</td>
<td>15</td>
<td>1.2</td>
<td>0.9</td>
<td>1.2</td>
<td>0.07</td>
</tr>
<tr>
<td>Breast</td>
<td>5</td>
<td>0.4</td>
<td>0.3</td>
<td>0.7</td>
<td>0.05</td>
</tr>
<tr>
<td>Vulva</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vagina</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cervix uteri</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corpus uteri</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uterus unspecified</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Placenta</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Penis</td>
<td>31</td>
<td>2.5</td>
<td>1.8</td>
<td>3.2</td>
<td>0.22</td>
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<tr>
<td>Prostate</td>
<td>153</td>
<td>12.3</td>
<td>8.7</td>
<td>21.5</td>
<td>1.07</td>
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<td>0.7</td>
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<tr>
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<td>1.1</td>
<td>0.8</td>
<td>1.5</td>
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<tr>
<td>Bladder</td>
<td>44</td>
<td>3.5</td>
<td>2.5</td>
<td>5.7</td>
<td>0.28</td>
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<tr>
<td>Other urinary organs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Eye</td>
<td>16</td>
<td>1.3</td>
<td>0.9</td>
<td>1.4</td>
<td>0.11</td>
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<tr>
<td>Brain, central nervous system</td>
<td>9</td>
<td>0.7</td>
<td>0.5</td>
<td>0.8</td>
<td>0.05</td>
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<td>Thyroid</td>
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<td>0.9</td>
<td>0.09</td>
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<td>0.1</td>
<td>0</td>
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<td>0.5</td>
<td>0.4</td>
<td>0.03</td>
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<td>Non-Hodgkin lymphoma</td>
<td>40</td>
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<td>2.3</td>
<td>3.3</td>
<td>0.26</td>
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<tr>
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<td>Freq. (%)</td>
<td>Crude rate (per 100,000)</td>
<td>ASR 0-64 (%)</td>
<td>Cum. (%)</td>
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<tr>
<td>----------------------------------</td>
<td>------------------</td>
<td>-----------</td>
<td>--------------------------</td>
<td>--------------</td>
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<td>Mouth</td>
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<td>Testis</td>
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<td>0.02</td>
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<td>-</td>
<td>82.1</td>
<td>134.8</td>
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| All sites but C44                | 1570             | 100       | 80.2                     | 131.6        | 0.39     | ALLbC44
GENEVA FORUM—TOWARDS GLOBAL ACCESS TO HEALTH 30 AUGUST—1 SEPTEMBER 2006

In our globalized world demand for access to health and care is increasing. While the means to improve health are growing, access nonetheless remains very limited in many parts of the world. Insuring universal access to healthcare services and preventive measures are challenges that the international community must address. How can health systems respond to the growing need for action?

The Geneva University Hospitals and the Faculty of Medicine of the University of Geneva are jointly organizing an international Forum "Towards Global Access to Health" in partnership with major national and international organizations.

This Geneva Forum, under the premises of equity, training and partnership, will provide a unique opportunity for all participants to present and explore innovative partnerships and programmes facilitating access to health. Attendees will not only hear state of the art reviews and debates but will also have direct access to international experts and organizations based in Geneva.

Bring your expertise and field experience to contribute to and challenge current knowledge!

WHEN:
August 30- September 1st, 2006

WHERE:
International Conference Centre of Geneva, Switzerland

THEMES:
Access to health systems, Access to drugs, vaccines & diagnosis, Research & training, Communication and new technologies, International mobility and Health, Humanitarian crisis and development, Civil society and community based initiatives.

WHO SHOULD ATTEND?
Anyone interested in medicine, public health, global health, training and capacity building, public private partnerships, research, projects that improve access to health and care, role of civil society, NGOs, public services, hospitals and medical education networks.

HOW TO REGISTER:
http://www.hcuge.ch/genevahealthforum/GeneralInformation.html
Protocol for the Treatment of Gynaecological Malignancies booklet available on our website!

This is the 9th Edition of the booklet, “Protocol for Treatment of Gynaecological Malignancies”. This booklet was first published in 1990 after the establishment of the Gynaecological Oncology Unit and represents the views of those actively involved in the Groote Schuur Hospital, in Cape Town, South Africa, combined Gynaecological/Radiotherapy Assessment Clinic including Gynaecological Oncologists, Radiotherapists, and Pathologists. To strengthen ties with the private sector, Neil Wilson, who is a radiation oncologist, has joined the editorial board. Judy Whittaker edited the Histology section.

It should be remembered that, as with previous editions, this 9th edition represents current views on the treatment of gynaecological cancer and should be used as a guide to staging and treatment and not as a comprehensive reference work. It nevertheless will be of value to under- and postgraduate students, interns, and registrars in training and practising gynaecologists. This booklet may serve as a guideline to standardize the management of patients with a gynaecologic malignancy.

We are convinced that the interests of our patients are served by a multi-disciplinary approach involving, not only the medical profession, but also oncologically trained nursing sisters, radiographers, social workers, dieticians, occupational therapists and volunteers. This approach can only be put into practice in a specialised unit and we would urge that patients with gynaecological malignancies be referred to such a unit.

This 9th edition contains changes, based on published data and key references have therefore been included.

Robbert Soeters
Lynette Denny
Leon van Wijk
Katrien Dehaeck
Bruce Howard
Nomonde Mbatani
Neil Wilson

The complete booklet can be found on our website at: www.aortic.org (Africa site, under downloads)

1st African Education Cancer Conference

18 - 20 October 2006

at Le Meridien, Abuja, Nigeria

For more details visit www.mdanderson.org/conferences
INCTR (International Network for Cancer Treatment and Research) has adopted a number of strategies in approaching cancer control in low resource settings. The most recent is to work closely with particular countries in the broad context of cancer control. The first of INCTR’s national collaborations will be with Cameroon. On April 6th this year, a Convention was signed with the Minister of Public Health, Urbain Olanguena, establishing a partnership in the context of cancer control in Cameroon. A cancer control committee (Comité National de Lutte contre le Cancer, CNLC) has already been established and a national cancer control plan developed. INCTR will assist the committee in achieving specific high priority goals in the context of this plan by providing training and education to health professionals. Visiting experts in various disciplines will spend time in Cameroon both to provide training and to assess the existing resources (human and material) in relevant disciplines. Plans for improvement in the context of existing constraints will be made and a small number of projects will be selected for implementation in the first year. An INCTR office will be established in Cameroon in order to provide an effective liaison between INCTR and CNLC and to gather and tabulate relevant information about resources and needs in Cameroon (initially in the capital city, Yaoundé). It will also help to coordinate projects undertaken in conjunction with the CNLC and with other organizations working in this sector.

In order to ensure that cancer control efforts are effectively coordinated, all partners agree on the need for a focal point for cancer control activities, including prevention, diagnosis, treatment and palliative care. A cancer center linked to the CNLC will, therefore, be established. The center will provide coordinated cancer services, including palliative care, education and research and will have a strong outreach program.

**Enhanced Communication**

Limited resources are often rendered even less efficient by the fragmentation of services and the deep divide between public health and health care. The present partnership should do much to resolve problems of this kind in Cameroon. The CNLC and INCTR anticipate, for example, that recommendations for the introduction of legislation relevant to cancer control will be made to the Minister of Public Health, and frequent meetings among those involved in diagnosis and treatment should lead to more effective patient management as well as coordination between screening programs and treatment programs. It is anticipated that the major institutions in Cameroon will participate in some of INCTR’s clinical studies.

*Signing ceremony in Yaoundé, April 6th*
THE ROLE OF IMAGING IN ONCOLOGY
DR B SMITH, RADIOLOGIST, JAMES PAGET HOSPITAL, NORFOLK

INTRODUCTION
Imaging has an important role to play in all patients with cancer. This includes the use of imaging:
1. to detect the presence of a suspected cancer;
2. in obtaining a tissue diagnosis;
3. to stage the cancer using the TNM (or other) system;
4. to help in assessing curative/palliative treatment options;
5. to assess response to treatment;
6. to detect recurrence;
7. as a means of follow-up/surveillance.

Modern imaging techniques includes plain films (“xrays”), mammography, ultrasound (U/S), fluoroscopy (“screening”), computed tomography (CT), magnetic resonance imaging (MRI) and nuclear medicine including positron emission tomography (PET). The role of each technique will be discussed in some detail below.

PLAIN FILMS
These include chest x-rays (CXR), abdominal x-rays (AXR) and x-rays of long bones and joints. This technique uses ionising radiation generated by an x-ray tube that is passed through the region of interest to create an image. Fluoroscopy, mammography and CT use the same means of creating an image. Plain films are often taken after the initial history and physical examination has raised the suspicion of an underlying cancer, eg a CXR where lung cancer is suspected. Overall plain films act as a trigger for further more detailed imaging (U/S, CT) of the region in which the cancer is suspected. However the plain film assessment of a bone tumor plays an important part in assessing its aggressiveness and the tumor type (osteosarcoma as opposed to chondrosarcoma).

A

Picture of a Chest Xray (Posterior-Anterior view)

Continued on next page...
THE ROLE OF IMAGING IN ONCOLOGY (Cont.)

DR B SMITH, RADIOLOGIST, JAMES PAGET HOSPITAL, NORFOLK

MAMMOGRAPHY
This is the technique of choice where a patient presents with a breast lump to detect and characterise abnormality. Specialised x-ray equipment is required to produce very fine detail in order to detect tiny clumps of calcification that could represent an early ductal cancer. This will often be used in conjunction with local U/S which helps distinguish solid from cystic lumps AND to guide cyst aspiration and the biopsy of solid lesions. It can also be used for stereotactic biopsy and for needle localisation. Mammography is also plays an important role in breast cancer screening programmes in the at risk groups.

ULTRASOUND
Ultrasound uses high frequency sound waves that are passed into the body and on their return are used to create an imaged represented on a gray scale high resolution display (monitor). Ultrasound is very safe as it does not use the harmful ionising radiation used by plain film radiography, flurouscopy, mammography and CT. It is however operated dependant and special training is required to use the modality. It is the main first line modality used when searching for abdominal and pelvic abnormalities, assessing superficial organs (thyroid, breast, soft tissue) and distinguishing solid from cystic lumps. It has revolutionised the technique of obtaining a biopsy specimen for tissue diagnosis in that most solid organs and superficial lesions that are not totally obscured by air or bone can have an ultrasound guided core biopsy rather than a fine needle aspiration biopsy (FNAB). The placement of the biopsy needle and the taking of the biopsy sample happens under direct ultrasound visualisation. In doing this the likelihood of a positive yield is much higher and the tumor tissue can be further characterised by the histopathologist using special stains.

Continued on next page ...
THE ROLE OF IMAGING IN ONCOLOGY (Cont.)
DR B SMITH, RADIOLOGIST, JAMES PAGET HOSPITAL, NORFOLK

C

Ultrasound scan of a liver (transverse scan)

FLUOROSCOPY
This is a specialised technique where a contrast (radiodense) material like barium or gastrograffin is introduced into the gastrointestinal tract by mouth or via the anus and serial images are taken as the material passing through the region of interest (oesophagus, stomach, small bowel, large bowel). Other techniques involve introducing more water soluble agents (urograffin and low molecular weight intravenous agents) into the bladder, up a ureter, along a sinus or fistula tract or into the blood stream to image this region. Intravenous urograms (IVU) is an example of an examination using intravenous contrast.

D

Picture of a double contrast barium enema

Continued on next page ...
THE ROLE OF IMAGING IN ONCOLOGY (Cont.)

DR B SMITH, RADIOLOGIST, JAMES PAGET HOSPITAL, NORFOLK

COMPUTED TOMOGRAPHY (CT)

This imaging technique also uses ionising radiation but in a highly specialised way to produce very detailed images of the body. CT is the main modality used in cancer imaging as it allows large areas of the body to be imaged very rapidly and accurately. The patient lies on a table that moves through a hole around which a tube rotates at very high speed (up to 2 complete rotations per second). The axial acquisition of the images allows the body to be sliced into very thin sections (1mm to 2.5mm sections) producing images of very high detail so that very small abnormalities can be detected. The use of intravenous and oral contrast is fundamental to the excellent resolution provided by CT. Because of the speed of image acquisition vascular anatomy is excellently displayed. Two very important advances in CT has made it such an invaluable technique. The first was the slip ring technology which allowed the tube to rotate continuously in one direction as the patient moved through the gantry. This gave rise to helical or spiral CT. The second more recent advance is the use of multiple rows of very thin detectors placed side by side each acquiring large amounts of data as the tube spirals around the patient to produce images of exquisite detail and accuracy. This is called multi-detector or multi-slice CT. Now with multiplanar display capabilities the body can be viewed in all three planes (axial, coronal and sagittal) as well in oblique view planes. This allows accurate processing of the imaging data set and therefore accurate information is obtained which is vital for the correct staging of the cancer which has important therapeutic implications. The major concern around multislice CT is the high radiation dose to the patient which is potentially harmful in the long-term. This is of particular concern in children and adults of the reproductive age. CT is also highly specialised technology and therefore very expensive and thus limited to large centres and the private sector.

Picture of a CT scan of the liver (post contrast arterial phase)
THE ROLE OF IMAGING IN ONCOLOGY (Cont.)

DR B SMITH, RADIOLOGIST, JAMES PAGET HOSPITAL, NORFOLK

MAGNETIC RESONANCE IMAGING

This highly specialised technique uses a very powerful magnet to create a homogenous magnet field within the body. A small amount of energy in the form of a radiofrequency pulse is introduced into the field of interest (body region that is being imaged). This disturbs the local magnet direction and this difference is maintained until the radiofrequency pulse is turned off. The local field disturbance now diminishes in strength as it lines up with the main field. In order to achieve this the energy added by the introduction of the radiofrequency pulse is lost from the tissue and detected by a local receiver coil. This sequence is repeated many times during the making of an image. Thus the time taken to perform an MRI examination is in the order of 10 times longer than that of CT! MRI provides exquisite contrast detail between different tissues within a body region and even within an organ. This is because MRI is not only able to image the differences in the quantity of water within different tissues but also the differences in the bound state of the water. So MRI is excellent for imaging the brain and spine (CNS), the neck, the solid abdominal organs, the male and female pelvic organs including the rectum, the marrow containing skeleton, and the whole musculo-skeletal system. The use of paramagnetic contrast agents such as gadolinium chelates and liver and reticulo-endothelial specific agents improve the ability to detect and characterise abnormalities. There are however certain limitations of MRI which includes sensitivity to movement and the inability to image tissue that contains very little water (lungs and cortical bone). There are also contraindications to MRI which includes the presence of a pacemaker, neurosurgical vascular clips, cochlear implants and intra-ocular metallic foreign bodies. The gantry is also longer and narrower than that of CT and unsuitable for large and claustrophobic patients. Small children usually require a general anaesthetic for MRI imaging. As with CT the specialised technology is very expensive and therefore limited to more wealthy regions and centres.

F

Picture of an MRI of the Spine (Sagittal T1)

Continued on next page...
NUCLEAR MEDICINE

This is also a very highly specialised technique that uses ionising radiation in the gamma range compared to the x-ray energy range. It images physiological processes such as bone turnover in order to detect abnormalities eg bone metastases. It is incredibly sensitive but not very specific for pathology. Bone sans, liver scans, red and white cell scans are amongst the different types of nuclear medicine scans using technecium 99. A new radioisotope technique called positron emmision tomography(PET) using a highly unstable positron labelled 18 fluoro-deoxyglucose(FDG) to image glucose turnover within the body to detect abnormality. This is based on the principle that abnormal tissue has a higher energy demand and therefore a higher glucose turnover. However it is not able to distinguish infections from small cancers.
THE ROLE OF IMAGING IN ONCOLOGY (Cont.)
DR B SMITH, RADIOLOGIST, JAMES PAGET HOSPITAL, NORFOLK

FUSION IMAGING

This is the technique of the near future. Functional imaging like PET is fused with the anatomical imaging data of the specific region in order to improve specificity. MR Spectroscopy (brain and prostate) combined with the anatomical MR images is another example.

CONCLUSION

Imaging plays a vital role in the journey of the patient with cancer from detecting the suspected cancer through to surveillance following treatment. Use of the appropriate imaging modality provides invaluable information that is required by the clinician in each case.

WRITTEN BY DR B A SMITH, DIAGNOSTIC RADIOLOGIST, JAMES PAGET HOSPITAL, NORFOLK, UNITED KINGDOM.

ACKNOWLEDGEMENTS:

PICTURES:

A Daehee Han, et al; Radiographics 2003;23;1521-1539
B Wei Tse Yang, et al; Radiology 2006;239;52-60
C/E Shahid Hussein, et al; Radiographics 2004;24;3-19
D Gelfand and Ott; American Journal of Roentgenology 1990;154(2); 279-283
F/G Toshiki Kazama, et al; Radiographics 2005;25;191-207

Pfizer Global Health Fellow awarded to AORTIC!

It is with pleasure that we can announce that from July 2006 for period of 3 - 6 months Pfizer will sponsor a fellow (Mr Keith Paulsen) to spend his time immersed in helping build the infrastructure of AORTIC, to foster links within our vast African continent, to help with organising our Cancer in Africa 2007 conference in Cape Town and to supervise other key projects. In addition, the fellow will assist the secretariat in supporting advocacy around cancer, particularly with the African Union health ministries. AORTIC is delighted and extremely grateful to Pfizer and the American Cancer Society for providing us with this very exciting opportunity. We are particularly grateful to Ann McMikel of the American Cancer Society for facilitating and making this wonderful opportunity come true.

AORTIC President: Dr Paul Ndom

&

AORTIC Secretary/Treasurer: Professor Lynette Denny
Health Care Crisis

Staff shortage; lack of training and budget constraints are crippling systems in many developing countries.

Health workforce crisis is having a deadly impact on many countries' ability to fight disease and improve health, new WHO report warns.

World Health Report outlines need for more investment in health workforce to improve working conditions, revitalize training institutions and anticipate future challenges.

7 APRIL 2006 | GENEVA/LUSAKA/LONDON -- A serious shortage of health workers in 57 countries is impairing provision of essential, life-saving interventions such as childhood immunization, safe pregnancy and delivery services for mothers, and access to treatment for HIV/AIDS, malaria and tuberculosis. This shortage, combined with a lack of training and knowledge, is also a major obstacle for health systems as they attempt to respond effectively to chronic diseases, avian influenza and other health challenges, according to The World Health Report 2006 - Working together for health, published today by the World Health Organization (WHO).

More than four million additional doctors, nurses, midwives, managers and public health workers are urgently needed to fill the gap in these 57 countries, 36 of which are in sub-Saharan Africa, says the Report, which is highlighted by events in many cities around the world to mark World Health Day. Every country needs to improve the way it plans for, educates and employs the doctors, nurses and support staff who make up the health workforce and provide them with better working conditions, it concludes.

"The global population is growing, but the number of health workers is stagnating or even falling in many of the places where they are needed most," said WHO Director-General Dr LEE Jong-wook. "Across the developing world, health workers face economic hardship, deteriorating infrastructure and social unrest. In many countries, the HIV/AIDS epidemic has also destroyed the health and lives of health workers."

The World Health Report sets out a 10-year plan to address the crisis. It calls for national leadership to urgently formulate and implement country strategies for the health workforce. These need to be backed by international donor assistance.

Infectious diseases and complications of pregnancy and delivery cause at least 10 million deaths each year. Better access to health workers could prevent many of those deaths. There is clear evidence that as the ratio of health workers to population increases, so in turn does infant, child and maternal survival.

"Not enough health workers are being trained or recruited where they are most needed, and increasing numbers are joining a brain drain of qualified professionals who are migrating to better-paid jobs in richer countries, whether those countries are near neighbours or wealthy industrialized nations. Such countries are likely to attract even more foreign staff because of their ageing populations, who will need more long-term, chronic care," said WHO Assistant Director-General Dr Timothy Evans.

To tackle this crisis, more direct investment in the training and support of health workers is needed now. Initial costs will be for the training of more health workers. As they graduate and enter the workforce, funds will be needed to pay their salaries. Health budgets will have to increase by at least US$10 per person per year in the 57 countries with severe shortages to educate and pay the salaries of the four million health workers needed to fill the gap. To meet that target within 20 years is an ambitious but reasonable goal, the Report concludes.

Financing this gap will require significant, dedicated and predictable funding from national sources, as well as from international development partners. The Report recommends that of all new donor funds for health, 50% should be dedicated to strengthening health systems, of which 50% should be dedicated specifically to training, retaining and sustaining the health work-
Health Care Crisis (Cont.)

At least 1.3 billion people worldwide lack access to the most basic healthcare, often because there is no health worker. The shortage is global, but the burden is greatest in countries overwhelmed by poverty and disease where these health workers are needed most. Shortages are most severe in sub-Saharan Africa, which has 11% of the world's population and 24% of the global burden of disease but only 3% of the world's health workers.

The Report calls for prompt and innovative initiatives to improve efficiency. For example, HIV/AIDS, TB and other priority disease programmes have implemented ways for health workers with limited formal training to successfully carry out specific health tasks. These experiences should be drawn upon to develop national health workforce strategies.

The World Health Report recommends that in order to achieve the goal of getting "the right workers with the right skills in the right place doing the right things," countries should develop plans that include the following:

- Acting now for workforce productivity: better working conditions for health workers, improved safety, better access to treatment and care;
- Anticipating what lies ahead: a well-developed plan to train the health workforce of the future;
- Acquiring critical capacity: workforce planning; development of leadership and management; standard setting, accreditation and licensing as drivers for quality improvement.

Beyond the national strategies the report urges global cooperation:

- Joint investment in research and information systems;
- Agreements on ethical recruitment of and working conditions for migrant health workers and international planning on the health workforce for humanitarian emergencies or global health threats such as an influenza pandemic;
- Commitment from donor countries to assist crisis countries with their efforts to improve and support the health workforce.

The Eleventh Biennial Meeting of the IGCS
October 14-18, 2006, Santa Monica, California, USA

Please visit the following website for more information: http://www.kenes.com/IGCS-11/

The biennial event brings together leaders from all over the world to examine issues in gynecologic cancer. The Biennial Meeting is hosted by a local organizing committee and led by members of the IGCS from the region.

IGCS membership offers you reduced registration fees and advanced housing registration when you sign up to attend the Biennial Meeting. At the meeting, members can attend high quality scientific offerings on the latest advances leading to progress in gynecologic cancer. Members will share their expertise by presenting their research before international leaders.

Biennial Meetings take place in outstanding sites throughout the world including Seoul, Korea in 2002, Edinburgh Scotland in 2004 and Santa Monica, California in 2006. Being an active member of the IGCS gives you the right to sponsor your own or a colleague's abstract for presentation at the Biennial Meeting.
The American Psychosocial Oncology Society (APOS) Scientific Program Committee is requesting proposal abstracts for pre- and post-conference workshops at the APOS 4th Annual Conference, 1 – 4 March 2007, in Austin, TX. The conference is dedicated to Promoting Quality Psychosocial Cancer Care across Diverse Communities. Abstracts will be considered for pre-conference workshops held on Thursday, 1 March 2007, as well as post-conference workshops on Sunday, 4 March 2007. Please remember, these proposals are due 1 June 2006.

Workshops should be interactive and focus on teaching particular skills that participants can learn in four hours. Proposals for workshops that teach clinically relevant material or interventions are encouraged, as well as proposals for workshops that provide an introduction to specific methods used in qualitative or quantitative psychosocial oncology research.

Previous APOS Conferences have included workshops on problem-solving psychotherapy, psychopharmacology, quality-of-life assessment, the use of technology in outreach, and hypnosis. Participants have appreciated workshops that use a variety of teaching modalities, include interaction between the workshop leader and other attendees, and provide printed materials for home reference.

Proposal abstracts should describe the content of the workshop in 500 words or less. In addition, please include the names and contact information of the workshop chair and all speakers (telephone number, e-mail address and mailing address), a description of the target audience and at least two quantifiable learning objectives with your proposal. Interdisciplinary collaborations and workshops incorporating racial and ethnic diversity are particularly encouraged.

Please send abstracts and all relevant information in a Microsoft Word file to the preconference subcommittee chair, Bill Pirl, via e-mail at wpirl@partners.org. To download a workshop abstract submission form, visit www.apos-society.org. Please check the APOS website regularly for updates about the 4th Annual Conference. A second Call for Abstracts for the conference sessions will be sent out separately.

If you have any questions, please contact APOS Headquarters via e-mail at info@apos-society.org or via telephone at 434.293.5350.
AORTIC extends sincere condolences following death of WHO Director-General Dr Lee Jong-wook

The African Organisation for Research and Training in Cancer (AORTIC) wish to express their sincere condolences to the family of Dr Lee Jong-wook, Director General of the World Health Organisation, who died suddenly on 22 May 2006.

The President of AORTIC, Dr Paul Ndom, Secretary/Treasurer, Professor Lynette Denny and the Executive Council Members, would like to express our deepest sympathy and heartfelt condolences.

Dr Lee became Director-General in July 2003, after almost two decades of service in WHO. He vigorously supported ratification of the Framework Convention on Tobacco Control, which entered into force in February 2005. Under his leadership, Ministers of Health at the 58th World Health Assembly adopted their first-ever resolution on cancer prevention and control. In October 2005, WHO published a ground-breaking report on Preventing Chronic Diseases Today, which proposed a new Millennium Development Goal: to reduce the projected trend of chronic disease death rates by 2% each year until 2015. This would avert over 8 million deaths due to cancer in the next decade.

In a contribution to UICC's Annual Report 2004, Dr LEE said, "The non-governmental organizations have to be involved, committed and participate. This has to be complemented by the government and international organizations like WHO. None of these entities can do it alone."

For a biography of Dr LEE Jong-wook, see http://www.who.int/dg/lee/en/index.html

THE CHANGING WORLD OF CLINICAL TRIALS CONFERENCE
27—28 JUNE 2006 IN JOHANNESBURG, SOUTH AFRICA

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The Familial Cancer Centre
Getting to the bottom of cancer in the family

Shall I develop breast cancer if a family member did? If so, are there ways I can avoid it? These are the kinds of questions that many people ask themselves when cancer affects a family member. The Familial Cancer Centre seeks to answer such questions and provides support to individuals and families affected by breast and ovarian cancer.

The Familial Cancer Centre is situated at the Netcare Femina Women’s Hospital in Pretoria. The Centre uses the latest in cancer research to assess the risks to individuals and families with a strong family history of cancer. Genetic testing is combined with genetic and psychological counselling. Clinical assessment, a screening programme and prophylactic interventions are offered to interested individuals where appropriate.

Who is at risk of developing cancer?

Many diseases may be traced through family lines and in some families cancer seems to occur as a familial disease. While the incidence of most forms of cancer is on the increase and everyone is at risk to develop cancer, it is estimated that about 5-10% of cancer cases are caused mainly by inherited factors. Genetic factors also play a role in many other cases as part of the multi-factorial origin of cancer. The most common and well-known form of inherited (familial) cancer is breast cancer.

Factors in the family history that indicate that female members of the family may have an inherited increased risk for breast and/or ovarian cancer include:

- Breast and associated cancers (mainly ovarian and prostate cancer) occur in each generation;
- Cancers are diagnosed at a younger age and in more individuals than is usual.
- Bilateral breast cancer (i.e. occurring in both breasts) in family members;
- Two different types of cancer (e.g. breast and ovarian cancer) in a single individual
- Unusual cancers namely male breast cancer or fallopian tube cancer in family members.

Families with other forms of cancers occurring in the family are also welcome at the clinic. Examples include familial colon and endometrial cancer.

Individuals from families with an increased incidence of cancer who are worried about their own risk would probably benefit from visiting a unit such as the Familial Cancer Centre, which can assess the risk and give appropriate advice.

Individuals from outside the Gauteng area can now also utilize the service via a telephonic genetic assessment and expert counseling service.
The Familial Cancer Centre can assess and manage your cancer risk

The Centre offers the services of a geneticist, genetic nurse, gynaecologic oncologist and clinical psychologist. Services offered at the Centre include:

- Risk assessment utilizing the family history
- Advice on available genetic tests and applicability
- Mutation analysis for families and individuals
- Post-test counseling including interpretation of test results
- Support through expert counseling
- Development of risk management strategies
- Advice and recommendations on prophylactic interventions
- Advice and referral for therapeutic interventions
- Advanced diagnostic and cancer screening services
- Innovative new approaches to cancer screening, including:
  - Dynamic angio-thermography (DATG)
  - Three-dimensional ultra-sound

Interested individuals can join screening programmes for breast and ovarian cancer at the Centre. Please contact us at 012-328 2676.

The Femina Women’s Hospital

The Familial Cancer Centre is conveniently situated at the Netcare Femina Women’s Hospital, 460 Belvedere Street, Arcadia, Pretoria. As most (but not all) of our patients are women, the Centre has a close relationship with the hospital, which provides support services such as the Breast Care Unit, radiological facilities and in-hospital care. The hospital also offers gynaecological, general and plastic surgery including advanced laparoscopic and specialised oncological surgery.

A Netcare and University of Pretoria initiative

As part of an ongoing commitment to community care and responsibility, Netcare and the Femina hospital have collaborated with the University of Pretoria to establish the Familial Cancer Centre. Previously situated at the University, the Centre was recently moved to the Femina Hospital as part of an expansion programme.

Contact us with your concerns about familial cancer

Please call the Familial Cancer Centre if you or your family have concerns about familial cancer.

Familial Cancer Centre
46 Belvedere Street
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SELF-LEARNING TEACHING TOOL FOR NURSES ON CD ROM

An estimated 60% of patients with cancer are treated with radiation therapy. Are you prepared?

Radiation Oncology Nurses Enhancing Excellence (RONEE) is an in-depth, self-learning computerized program designed as a teaching tool for nurses new to radiation therapy as well as a supplement for experienced RT nurses.

You and your colleagues can utilize the nurse-to-nurse training offered by RONEE on a broad range of site-specific, current treatment and evidence-based symptom management information.

Each learning module features site- and treatment-specific information and each disk contains an audio presentation, speaker notes, and slides with appropriate animations.

The learning modules include:

* Radiation Basics and Childhood Cancers (Module 1) by Maureen McQuestion and Joni Dunn
* Central Nervous System Cancers (Module 2) by Maurene McQuestion
* Head and Neck Cancers (Module 3) by Elise Carper
* Lung and Esophageal Cancers (Module 4) by Marilyn L. Haas
* Breast and Pancreatic Cancers (Module 5) by Tracy K. Gosselin-Acomb
* Gynecologic and Urinary Cancers (Module 6) by Donna Green
* Malignancies Associated With the Male Pelvis and Colorectal Cancer (Module 7) by William P. Hogle
* Extremities, Benign Disorders, Radioprotectants and Radiosensitizers (Module 8) by Kathleen E. Bell

Information in each module includes common diseases within the region, treatment design/planning, patient education, evidence-based symptom management, and long-term follow-up.

Includes 19.2 contact hours for all eight modules. Submitting CE credit is free for ONS members and $15 per module/test for nonmembers.

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For more information see their website at:
http://esource.ons.org/ProductDetails.aspx?sku=INCD0144

This UICC-sponsored manual is intended to simplify the learning of colposcopy and treatment of cervical intraepithelial neoplasia with cryotherapy and loop electrosurgical excision procedure so as to allow dissemination of the skills in low-resource settings. The manual can be used as a resource for short teaching courses for health-care personnel; as a teaching and learning aid for medical and nursing students; as a reference for medical practitioners; as a field manual in screening programmes, or even as a self-learning tool.

Authors: J.W. Sellors, R. Sankaranarayanan
Publisher: IARC, Lyon, 2003; 144 pages

Available in English from the World Health Organization (WHO)
20 Avenue Appia
1211 Geneva, Switzerland
Cost: US$ 20.25

Visit AORTIC's website at www.aortic.org regularly for the latest information about our 6th International Cancer conference, Cancer in Africa, to be held from 25—28 October 2007 in Cape Town, South Africa.