



About this issue...

The impact of HIV infection on women receiving radiation for cervical cancer²

It is well known that HIV positive women with cervical cancer are younger and have more squamous histology than the HIV negative group. Data describing outcomes of radiation treatment of HIV positive patients, suggests increased toxicity, but survival data for cervical cancer in these patients is scarce.^{3,4} In a retrospective comparative trial reported in this issue, short and long term outcomes of HIV positive and HIV negative women are compared regarding clinical and tumour characteristics, treatment prescription and completion, toxicity and survival.

This real-world experience from a public South African tertiary hospital describes poorer survival in HIV-infected women with cervical cancer, in spite of similar treatment prescriptions. More anaemia and blood transfusion needs contributed to a higher risk of unplanned treatment interruptions, in spite of being significantly younger. Not receiving the full prescribed radiation dosage was the strongest predictor of poor survival, and there was also a significant age-adjusted survival difference favouring HIV-negative women.

An original risk of ovarian malignancy index and its predictive value in evaluating the nature of ovarian tumour⁵

Various indices have been developed, evaluated and improved over time to assist clinicians to pre-operatively assess ovarian masses for malignancy and several are useful and in clinical use.⁶⁻⁸ When more characteristics and computer modelling are added, sensitivity and specificity can usually be improved at the cost of affordability and simplicity. Few of these indices perform better at the prediction of malignancy than the opinion of a true expert pelvic sonographer. In the current study of 274 tumours with histological diagnosis, Antovska is also the single sonographer, but the ultrasound findings used in the newly developed "ROMI" are reproducible and fairly objective.

The ROMI is a simple sum of points derived from a three-stage gradation of serum CA-125 (not the absolute value), data from the familial and personal history including reproductive age group and the ultrasound characteristics of the tumour. The latter include the previously described features in favour of malignancy as well as the clarity of tumour margin. The simplicity of the index is appealing as are the concepts of reproductive age and Ca125 categories. It remains to be seen how widely the new index will be accepted and whether the authors will try to improve the concept over time.

Cobalt-60 is a logical, economical and comparable alternative to Ir-192: analysis and institutional experience¹

In this study conducted on 80 applications of Cobalt-60 using an afterloading technique, dosimetry is studied. The authors conclude that the scientific and technical performance when compared to that

reported for Iridium-192 sources, is similar. The potential advantage of Cobalt for developing countries is its longer half-life, which results in one change of radio-active source for 25 changes when using Iridium. We invite correspondence about this issue from other radiotherapy institutes in support of this view or providing other perspectives including ease and safety of use and cost.

Transvaginal colour Doppler ultrasound in predicting response to chemoradiation in patients with carcinoma of the cervix⁹

Tumour outcomes and response to both chemotherapy and radiation has been linked to vascularity and angiogenesis as measured by different methods.¹⁰ Mangla and Singla evaluated Doppler ultrasound markers of tumour vascularity in a prospective manner before and after chemoradiation in 56 patients, and found that vascularity reduced significantly with tumour regression. Additionally, more vascular tumours were poorer responders to treatment. These investigators evaluated the flow in the tumour and also reports Doppler flow indices for both uterine arteries. It was the resistance and pulsatility indices in the latter that predicted tumour treatment response.

If further studies confirm these results, tumours (>40%) that will respond partially or poorly may in future be predicted and these patients offered alternative treatment options. These tests may also identify patients who may potentially benefit most from angiogenesis inhibition. Before being put into clinical practise, clearer categories need to be defined, tests need to be standardised and diagnostic and therapeutic advantage must be investigated. It is expected that this prognostic indicator will overlap significantly with other markers including node positivity, lymphovascular invasion, stage and differentiation grade. The investigators also report lower vascular resistance (higher vascularity) in adenocarcinoma.

Ultrasound in gynaecologic oncology

Imaging is essential in the evaluation of malignancies. In pelvic malignancies, transvaginal ultrasound seems to be as accurate in many instances as more advanced and expensive imaging. In the current issue, two ultrasound based evaluations feature: One is diagnostic and the other method reflects tumour biology and claims to have prognostic value as treatment response can be predicted.

Case report

We present a rare case of cervical leiomyosarcoma removed by radical hysterectomy. The mitotic count was low but the large tumour deeply invasive up to the caesarean section scar and the patient was offered adjuvant radiation.

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References available on request.