## Oesphageal squamous cell carcinoma in South Africa — an urgent need for improved efforts at screening and prevention

**To the Editor:** Oesophageal squamous cell carcinoma (OSCC) is a major health problem among black South Africans. Recently, Somdyala *et al*.[1] showed that incidence rates of OSCC in certain parts of the Transkei region remain among the highest in the world (e.g. 76.6 and 36.5 per 10 000 respectively for males and females from the Centane district). Clinically, OSCC is a silent but rapidly progressive disease. Typically, patients present at an advanced stage, and 70 - 80% of patients with malignant dysphagia have evidence of extra-oesophageal spread,[2] putting them beyond the hope of cure. Most patients are treated by means of oesophageal intubation, resulting in incomplete palliation and a median survival of only 2.2 months.[2] Important therapeutic advances include improved surgical techniques, newer chemotherapeutic agents, and the development of coated expandable stents for treatment of oesophageal-airway fistulas.[3] However, real improvements in morbidity and mortality rates from this deadly disease will require organised and concerted efforts aimed at screening and prevention.

Early diagnostic testing for OSCC currently encompasses blind oesophageal brush cytology and flexible oesophagoscopy with iodine staining and biopsy of unstained lesions. Experience from China indicates that population-based screening is justified in areas endemic for OSCC.[4] High-quality clinical studies from South Africa are required to determine the optimal screening modality, and to enable the establishment of specific local practice guidelines for screening. A cost-efficient infrastructure for carrying out the screening procedures (e.g. by nurse practitioners) needs to be set in place, as well as protocols for the handling and processing of cytological samples. Research is urgently needed to search for better screening modalities for OSCC, including those based on evolving cytogenics and/or genome-wide scanning technologies.

Prevention of OSCC requires understanding of its aetiology and pathogenesis. Unfortunately these remain unknown, but the geographical and racial disparities in OSCC incidence clearly hold important clues as to possible underlying environmental and genetic factors.[5] Other potential risk factors for South African OSCC include poor socio-economic status, age, male sex, smoking and alcohol use (particularly in combination), and nutritional deficiencies.[6] Most exciting, however, has been the finding of a clear epidemiological association between the level of dietary exposure to fumonisins and incidence of OSCC in different parts of the Transkei.[7] The fumonisins are carcinogenic mycotoxins produced by the fungus *Fusarium verticillioides* (*F. moniliforme*), which is a natural contaminant of maize.[7] These toxins have been shown to be hepatotoxic and hepatocarcinogenic in rats, and appear to exert their toxic effects via oxidative damage.[8] Although there is not yet proof of cause and effect in humans, it seems prudent to advise people from endemic OSCC areas about measures to reduce exposure to fumonisins, e.g. improved methods for storage of maize crops. In addition, they should be strongly encouraged to stop smoking, to reduce alcohol intake, and to eat a diet rich in fruit as a source of essential vitamins and antioxidants.

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## Cervical cancer screening leapfrog with human papilloma-virus testing

**To the Editor:** The article by Fonn in the December 2003 journal[1] discusses the options and requirements for a national cervical cancer screening programme in South Africa. It is disappointing that she does not mention the option of using human papillomavirus (HPV) testing instead of cytology as there is significant evidence in the literature pointing to the replacement of cytology with primary HPV screening.[2-4] The current problems of cytology as a screening test are a low sensitivity of approximately 60 - 80%, many equivocal results, and high human resource requirements as each slide has to be read by a qualified cyto-technologist. In a resource-poor country with high rates of cervical cancer innovative solutions are needed. HPV testing using molecular methods (PCR, DNA probe) has greater sensitivity, can be automated and therefore has greater capacity, and this may be the answer to a national cervical cancer screening programme by leapfrogging the Pap smear problems.

A South African biotechnology company (Glue Health) has

developed a self-sampling test (Sen-C-Test) for HPV testing. The idea is to eliminate the need for speculum examination, thereby reducing health care worker time in doing Pap smears, to provide an automated test that has high capacity to reduce the barriers (undergoing internal examinations) and provide greater convenience. There has been significant independent work done on self-sampling and HPV testing in Cape Town as an alternative approach to screening programmes in low-resource settings.[5,6]

The main disadvantage of HPV testing is specificity, and the suggestion that we should be doing primary screening with HPV testing followed by cytology on positive samples as suggested by Cuzick *et al*.[2] is highly relevant to any planned national cervical cancer screening programme for South Africa.

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## Disseminated tuberculous osteitis

**To the Editor:** I wish to comment on the interesting article by Drs Whitelaw, Currie and Littleton in a recent issue of the *Journal*.[1] Their article is similar to our reported cases in the literature in which we review the historical background published before 1965.[2]

Our two cases had six sites involved. All the lesions were osteolytic and showed no sclerosis radiologically.[2] Our patients showed changes only in the axial skeleton — for example skull, ribs and pelvis. There was no evidence of pulmonary tuberculosis radiologically.

The differential diagnosis of this condition includes multiple myeloma and metastatic carcinoma. These conditions are excluded by biochemical tests, biopsy of the affected site and the excellent response to treatment. As tuberculosis is readily treatable this condition, although rare, should always be considered in the differential diagnosis of multiple osteolytic lesions.

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