

tumour is malignant melanoma. Likewise, sentinel lymphadenectomy is not useful for staging disease in the management of atypical Spitz tumours because metastases from these tumours are not prognostic.

The results of Lallas and colleagues' study establish that sentinel lymph node metastasis is not of diagnostic or prognostic significance in patients with atypical Spitz tumours. What has not been determined is the therapeutic usefulness, if any, of sentinel lymphadenectomy. This question is important because some investigators suggest that sentinel lymphadenectomy is an unnecessary test if there is no prognostic significance. Additionally, some would argue against sentinel lymphadenectomy since no action will be taken if there is a positive sentinel lymph node (completion lymphadenectomy and adjuvant therapy are no longer recommended in patients with atypical Spitz tumour and sentinel lymph node metastases). Continued use of sentinel lymphadenectomy in the setting of atypical Spitz tumour is supported by the hypothesis that removal of any lymph node harbouring metastatic disease is therapeutic and prolongs the disease-free interval. There is not enough data to prove or disprove this hypothesis; however, in the current study, six of 541 patients died from complications of metastatic disease and only one of these patients had been treated with sentinel lymphadenectomy. However, no patient had disease progression in a recent report of children with atypical Spitz tumours who were not treated with sentinel lymphadenectomy.¹⁰ Overall the small number of patients and absence of 20 years of follow-up in these studies does not support a specific conclusion; the possibility that sentinel lymphadenectomy is of therapeutic benefit in patients with atypical Spitz tumours remains.

Interestingly, molecular staging of the primary tumour might have a role in atypical Spitz tumour. In a landmark study by Gerami and colleagues, a subset

of patients with atypical Spitz tumours was identified as having chromosomal copy number aberration and homozygous 9p21 deletions. In atypical Spitz tumours these specific molecular abnormalities in the primary cutaneous tumour correlate with progression beyond the sentinel lymph node.¹¹ Although the presence of lymph node metastases is not a sign of poor prognosis in patients with atypical Spitz tumours, it is unknown whether removing these metastases is of therapeutic benefit. Ultimately, this might be an arena where molecular analysis provides the best staging data.

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The need to expand global access to radiotherapy

The escalating global tide of cancer cases and deaths, and the increasing burden of disease in low-income and middle-income countries (LMIC), is a major global health challenge. To respond to this challenge, in 2012 the World Oncology Forum endorsed an urgent plan

of action—to lessen cancer deaths by 25% by 2025, achieving a worldwide reduction of 1.5 million deaths from cancer per year.¹

A comprehensive cancer management strategy is needed to achieve this target, especially in LMIC, and to

improve the quality of life of individuals already living with cancer. This strategy should combine prevention and early detection with treatment, including surgery, drug treatment, and radiotherapy, as well as management of survivorship, palliative care, and pain control.

Radiotherapy, an important element of comprehensive cancer management, is highly effective at improving survival and reducing suffering in individuals with cancer. However, access is inequitably distributed between poor and rich countries and has been largely ignored in efforts to close the cancer divide.² In high-income countries (HIC), radiotherapy is used in more than half of new cancer cases³ to cure localised disease, to palliate symptoms, and for disease control in incurable cancers. There are, on average, 8.6 radiotherapy machines per million inhabitants in such regions.

For many of the most common cancers in LMIC, including lung, breast, cervix, and head and neck cancer, radiotherapy is essential for effective treatment. But 29 of 52 African countries have no radiation facilities and the radiotherapy centres that exist tend to be outdated or non-operational.⁴ Almost 60% of available radiotherapy equipment in Africa is housed in South Africa and Egypt. Across Africa, there is, on average, 0.89 radiotherapy machines per million inhabitants and, in the poorest countries, the figure is much lower at 0.02 per million. Although regional inequality is most stark across Africa, regional disparities also exist in Europe,⁵ Latin America and the Caribbean, and Asia.

Misperceptions about the cost and complexity of radiotherapy have limited its availability in countries with competing priorities and underdeveloped infrastructure and regulatory capacity. However, available evidence points to its cost-effectiveness, especially when value is measured in factors other than survival.⁶ Radiotherapy requires a large initial investment, but the time horizon is long and the gains are lasting. Subsequent costs are low and stable relative to the initial investment. In 2004, the estimated total cost per treatment, in LMIC and HIC respectively, ranged from US\$5.80 to \$16.10 with a cobalt machine and from \$8.90 to \$27.50 with a linear accelerator, with the variation largely attributed to differences in machine use and equipment costs.⁷



A plan of action to ensure global access to radiotherapy is long overdue. In view of the grand convergence envisioned by the *Lancet* Commission on Global Health 2035,⁸ and drawing on successful experiences guiding investments for HIV/AIDS,⁹ the time is right for a global framework to guide investments in radiotherapy.

The Union for International Cancer Control (UICC) has established a Global Task Force on Radiotherapy for Cancer Control (GTFRCC), to develop a worldwide investment framework for radiotherapy, coordinating closely with the *Lancet* Commission on Global Surgery and the Global Task Force on Expanded Access to Cancer Care and Control in Developing Countries.¹⁰ The GTFRCC has convened 80 members from 30 countries, including individuals from civil society, radiation oncologists, physicists, radiation therapists, medical and surgical oncologists, cancer control organisations, health systems experts, and economists.

GTFRCC will estimate investments needed to close the gap between what exists at present and reasonable access to radiotherapy in LMIC by 2035. GTFRCC will develop an investment framework, incorporating external, domestic, and innovative financing strategies, and will identify the global burden of cancer amenable to radiotherapy, the core investments and enabling services needed for optimum integration of radiotherapy into health-care systems, and the expected outcomes from a global investment. The GTFRCC will report its recommendations to the

For more on GTFRCC see www.gtfrc.org

World Cancer Congress in Melbourne, Australia, in December, 2014.

The goals of the GTFRCC are consistent with the broad consensus that universal health coverage through access to care, including cancer, is a moral responsibility and a health investment that can be achieved.

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