Telehealth in remote Northern Territory: bridging the gap

To the Editor: The very real challenges of distance and travel facing people with disabilities in rural and remote Australia were recently highlighted by Samera in this Journal.1 Here at Katherine Hospital, the barriers to care described by Samera are being overcome through the innovative use of telehealth. For example, a 47-year-old Aboriginal woman was admitted to this hospital after suffering a right-sided intracerebral bleed, leaving her with a dense left-sided hemiplegia and severe cognitive deficits.

To facilitate community placement, the woman needed a wheelchair. Customised wheelchair design is undertaken by the Seating Equipment Assessment and Technical (SEAT) service in Darwin, which visits Katherine only once every 4 months. To overcome this, telehealth appointments were arranged by the SEAT occupational therapist at Royal Darwin Hospital, who remotely guided the occupational therapist at Katherine Hospital through the complex patient assessments that were necessary. As a result, a customised wheelchair was delivered to Katherine Hospital within 6 weeks.

What would previously have taken many months, including two dedicated aeromedical flights to and from Darwin and multiple transfers between hospitals, was all achieved while the patient remained in her room at Katherine Hospital.

Telehealth for Aboriginal patients in remote areas is an ideal model of culturally safe care. It enables a patient to use speciality services in familiar local environments and in the company of their family and trusted health care providers, resulting in greatly improved cultural and language communication and decision making.

Telehealth also overcomes the dynamic challenges of distance, travel and extreme weather that are so problematic in northern Australia, and it delivers real benefits in a highly cost-effective and sustainable manner. It is being applied to an increasingly diverse range of clinical interactions, providing highly valuable improvements in health care delivery to patients. Telehealth is rapidly becoming a community expectation, the new paradigm of equitable access to health care in remote Australia.

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Strongyloides stercoralis infection and antenatal care

To the Editor: Strongyloides stercoralis is a soil-transmitted helminth infection that affects more than 100 million people worldwide. It is known to be common in the Indigenous communities of northern Australia, with recorded prevalence often in the region of 30%–40%.1

Reliable enzyme-linked immunosorbent assay (ELISA) testing for the worm means that a sensitive and specific test is now available.2 However, ELISA testing is currently only performed in central laboratories, resulting in inevitable delays in diagnosis.

Strongyloides infection in pregnancy presents at least a theoretical threat to the mother’s health. While chronic Strongyloides infection can be relatively symptom-free, hyperinfection syndrome can ensue in immunocompromised patients, resulting in proliferation of infection, subsequent sepsicaemia, and a high mortality rate even in the best of circumstances. The administration of systemic steroids is known to be a common iatrogenic cause of the condition.3 In theory, should a woman require treatment with a steroid in the course of her pregnancy (for example, in the treatment of premature labour), then administering the drug in the presence of Strongyloides infection represents a considerable risk.

A recent report from the United States outlines such a case.4 A Haitian patient, 25 weeks pregnant and not known to be carrying a worm infection, presented to a New York hospital in premature labour, was administered steroids for the benefit of the fetus, and subsequently developed Strongyloides hyperinfection. The fetus was delivered stillborn, and the mother died of overwhelming sepsis.

S. stercoralis screening is already included in the routine health assessment of some refugee and migrant populations entering Australia, and is employed in well adult checks in some Aboriginal communities. Many unanswered questions remain over the prevalence of the infection in women of childbearing age.

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References

1. Hays et al. S. stercoralis infection in pregnancy presents at least a theoretical threat to the mother’s health. While chronic Strongyloides infection can be relatively symptom-free, hyperinfection syndrome can ensue in immunocompromised patients, resulting in proliferation of infection, subsequent sepsicaemia, and a high mortality rate even in the best of circumstances. The administration of systemic steroids is known to be a common iatrogenic cause of the condition. In theory, should a woman require treatment with a steroid in the course of her pregnancy (for example, in the treatment of premature labour), then administering the drug in the presence of Strongyloides infection represents a considerable risk.

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TO THE EDITOR:

Recent warnings of a rise in crystal methamphetamine ("ice") use in rural and remote Indigenous Australian communities should be heeded

To the Editor: Recent surveys indicate growing disquiet among health professionals nationally about the use of "ice" in some Indigenous communities,1 but with no clear evidence, as yet, of a feared general surge in its use.

During 2013 and 2014, we interviewed 304 key community leaders and service providers about alcohol controls in Queensland’s rural and remote Indigenous communities. A number of these people offered diverging views about the use of amphetamine-type stimulants (ATS), including ice (Box). In parallel surveys in eight rural and remote communities, with participants recruited opportunistically, 953 community residents provided their views about trends in local drug use. Consistent with the information provided by the interviews, 393 residents (41%) asserted that new drugs were being used in their communities, 106 (11%) nominating ATS as the drugs involved, and 55 (6%) specifically nominating ice. A previous study2 indicated that no similar reports had appeared in surveys of alcohol, tobacco, cannabis and other substance use during the preceding 15 years in far north Queensland. The same applies to similar settings in Arnhem Land (Northern Territory), where few participants (<1%) reported that they had ever tried any ATS, and none had used ice.3

It is of interest that cannabis appeared to have become endemic in around 4 years in Indigenous communities in both the NT4 and far north Queensland (ARC, unpublished data). Its widespread use followed a rapid rise from the late 1990s5 and early 2000s,6 enabled by locally embedded trafficking links with illicit drug suppliers outside the communities.5 Enforcement agencies have long held concerns that such links could also facilitate the marketing of ice. A similar, 4-year window of opportunity may, therefore, be all that is available to reduce the impacts of ice if demand for it emerges.

Effective prevention strategies and appropriate treatment approaches will require:

• improving community-level understanding of ice and its health and social consequences (Box);
• participatory research to better understand the resilience and protective factors that protect particular Indigenous individuals, families and groups from using ice, and to support the recovery of those who do use the drug;
• studies to determine the extent of the problem; and
• epidemiological studies to document current patterns and styles of ATS use, the precise nature of the substance used, and to monitor trends and patterns in the demand for novel substances such as ice among Indigenous Australians.

This will all require not only improved clinical capacity, but a sustained reinvestment in preventive services that have been
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time, whereas NM thickness did not change (Box).

For all melanomas there was a significant association between increasing thickness and decreasing survival ($P < 0.001$). Survival among patients with non-NM improved over time (crude hazard ratio for diagnosis year, 0.98 [95% CI, 0.97–1.00]; $P = 0.04$). This was explained by the decreasing trend in thickness (thickness-adjusted hazard ratio for diagnosis year, 1.00 [95% CI, 0.98–1.02]; $P = 0.94$). For NM, there was no evidence of a change in survival over time.

This analysis highlighted that although patients with non-NM were being diagnosed earlier, when lesions were thinner, and had improved survival outcomes, this was not true for patients with NM.

Since 2004, and particularly in the past 5 years, we have come a long way in the treatment of metastatic melanoma, with targeted therapies and checkpoint inhibitors offering an improved prognosis for patients with advanced disease (be it from NM or non-NM primary cancers). However, our best opportunity to reduce melanoma mortality still lies with early detection. While public health education and improved screening have led to earlier diagnosis of non-NM, greater awareness of the clinical features of NM (which are often distinct and differ from the ABCD [asymmetry, border, colour, diameter] diagnostic criteria) is still required to reduce overall melanoma mortality.

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