

Doing better with cancer in adolescents and young adults

Adolescents and young adults fare worse than children, yet do not have the same access to clinical trial therapy

IN ALMOST HALF A CENTURY OF CLINICAL TRIALS in children with cancer, survival rates have increased from less than 20% to over 80%. The national and international cooperation for such results has been an enormous feat of organisation. However, older adolescents and young adults, while having a higher and increasing incidence of cancer, have not fared so well.¹ As shown by Mitchell and colleagues in this issue of the Journal (page 59), few are recruited into clinical trials, and improvement in survival has lagged behind that in younger patients.² Some cancers that affect adolescents have a good prognosis (eg, Hodgkin's disease and gonadal tumours), and little difference in survival is seen between patients who are treated in trials and those who are not. Yet clinical trials are still necessary to find the least toxic therapy while maintaining excellent survival. On the other hand, other cancers common in adolescents, such as acute myeloid leukaemia, acute lymphoblastic leukaemia, rhabdomyosarcoma, osteogenic sarcoma and Ewing's sarcoma, are associated with considerably lower 5-year disease-free survival rates in adolescents than in younger patients.³

With increasing intensity of therapy, the importance of supportive care and a multidisciplinary approach cannot be over-emphasised. Outcomes of adolescents with acute lymphoblastic leukaemia have been reported to be markedly better with paediatric-based, high-risk (intensive) therapy performed in large teaching hospitals with appropriate support and a commitment to multidisciplinary coordinated care. In Children's Cancer Group trials between 1989 and 1995, older adolescents had a 6-year event-free survival of 64%, compared with 38% for similar patients on (adult) Cancer and Leukemia Group B trials.⁴

In France in 1993 and 1994, 15–20-year-old patients with acute lymphoblastic leukaemia treated within the paediatric FRALLE-93 study had a 5-year event-free survival of 67%, compared with 41% for 15–20-year-olds treated within the adult LALA-94 study.⁵

How can the lessons learnt in the large, multi-institutional, national and international paediatric cooperative groups be translated into better outcomes for adolescents and young adults with cancer? The Children's Oncology Group (United States, Canada, Australia, New Zealand) and adult cooperative groups sponsored by the National Cancer Institute have identified four initiatives to improve the accrual of adolescents and young adults with cancer into clinical trials:²

■ **Improving access to care through understanding barriers to participation.** These barriers remain largely unstudied, but might include the time, cost and effort of being involved in a clinical trial, which may deter both physician and patient. Oncologists in private practice may retain these patients rather than referring them to a tertiary-care facility or cooperative group member institution. Also, clinicians and patients may not be aware of opportunities for

clinical trials, the age policies of hospitals may prevent access to clinical trials for eligible patients, eligibility criteria may exclude some adolescent and adult patients, or there may be no available clinical trial for a patient.

■ **Developing a cancer resource network to provide information about clinical trials to patients, families, healthcare professionals and the public.**

■ **Enhancing adherence to protocol therapy among adolescents.** Although compliance was not found to be poor in the study by Mitchell et al,¹ adolescent and young adult patients are often perceived as having difficulty in complying with treatment while keeping up their normal lives. Ancillary medical, psychological and educational support should be directed towards their specific needs.⁶

Cooperation between paediatric and adult groups is essential to encourage entry into clinical trials.

■ **Increasing adolescent and adult participation in sarcoma trials specifically designed for patients in this age group.** Just as paediatric oncologists have little experience with epithelial tumours, some adult oncologists have

limited experience managing rare sarcomas.⁷

Cooperation between paediatric and adult groups is essential to encourage entry into clinical trials. For example, many Children's Oncology Group trials will admit patients up to 30 years of age. It is imperative that alliances are formed to enable haematologists and oncologists who treat adults to enrol their younger patients in these trials. Although institutions that are members of the Children's Oncology Group undergo rigorous performance monitoring to maintain high quality of care and data, this should not be a hindrance to such associations.

Managing cancer patients in clinical trials requires significant financial support for administration and data management, but the benefit in improved survival will prove to be highly cost effective. Current funding models for research in Australia may not be suitable for the funding of clinical research such as cancer trials. National Health and Medical Research Council funding is tied strongly to researchers' previously published research. Clinical research as part of a large cooperative group will not lead to numerous publications for individual clinicians. Nevertheless, commitment to such trials must be acknowledged by funding groups so that appropriate financial support to treat patients in trials is forthcoming. Only in this way will Australians of all ages with cancer have the benefit of the best evidence-based treatment within randomised controlled clinical trials in centres of excellence.

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