



Book Review

Pinkerton R, Philip T, Fervers B, eds. *Evidence-based Paediatric Oncology*. Williston, Vt: BMJ Books; 2002. 440 pages. Hardcover, \$139.00 US.

Although there are occasional breakthroughs in medicine, such as the discovery of penicillin or, more recently, the synthesis of imatinib for treatment of chronic myeloid leukemia, most treatments result only in small or a moderate difference in overall outcomes. Overall improvements in survival in patient with cancer over the past few decades have been achieved mainly by the accumulation of several moderate-sized steps rather than one large discovery. In order to reliably detect whether one treatment provides a small or moderate improvement in outcomes or not, unbiased comparison of the effects of competing treatment alternatives are necessary. It is now uniformly accepted that such reliable assessments of the effects of health care interventions can best be obtained in well-conducted, prospective, randomized, controlled trials (RCTs). Without well-done RCTs (and meta-analyses of RCTs), it would often be impossible to be certain whether new treatments offer a small or moderate, but worthwhile, benefit. Nevertheless, the oncology literature — pediatric or adult — continues to be flooded by phase II trials and case series that, as the authors of this book noted, “whilst of interest, often fail to take things forward. Similarly, there is a temptation in patients with poor prognoses to apply investigational regimens in the hope that if there is an improvement this will become evident when compared with historical controls. Such an approach has in many ways delayed progress.”

With this background in mind, the authors set out to identify and review all available RCTs in childhood cancer. That is, they aimed to compile what can be considered “the best existing evidence” that affected the practice of pediatric oncology. As a result, the book represents a unique attempt to further locate and categorize the high-quality evidence in oncology. Other efforts in medicine with a similar goal, such as the work of the Cochrane Collaboration, will undoubtedly be helped by this remarkable contribution. In the Introduction, the authors state they searched MEDLINE, CancerLit, and Embase from 1980 to identify all RCTs in pediatric oncology. The search will be updated contin-

ually as new RCTs are published and will be available at http://www.evidencebased_paediatriconcology.com.

The authors identified 60 RCTs that evaluated various aspects of treatments in solid tumors, 20 RCTs that compared different treatment strategies in Hodgkin’s and non-Hodgkin’s lymphoma, and 46 trials (plus 1 meta-analysis) in acute leukemia. The largest number of trials tested various forms of methods of CNS-directed therapy in acute lymphoblastic leukemia. All of these trials were reviewed in this book, with the objectives and conclusions of a given trial clearly highlighted. Often, but not uniformly, data on benefits and harms were summarized and the key survival curves were reproduced. The trials have been grouped according to the disease sections. An expert commentary precedes a summary of RCTs assembled in a given section. The goal of each commentary is to put the findings of every trial in the context of existing knowledge and to highlight the contribution of each trial. Occasionally, the commentators performed a brief critical appraisal of trials, since even the best evidence that we have (ie, RCTs) can be biased and the trials can be poorly conducted. The authors did not fall in the trap of reviewing only positive trials; rather, they understood that reviewing what does not work is often as important as knowing what intervention does work.

I believe this book is valuable and praiseworthy. It is a unique book in which a collection of the best pieces of the original research that contributed to dramatic improvement in the treatment of childhood cancer are assembled to show the evolution of treatments and ideas as well as to identify those trials that changed the practice of pediatric oncology. As such, the book will be useful not only to those interested in understanding how contemporary standards for childhood cancer have evolved, but also to those who attempt to use these data to develop guidelines or systematic reviews. Both teachers and trainees will benefit from the availability of this great compendium of the “best evidence” in childhood cancer.

Could anything have been improved? A chapter on the methods used to search RCTs would have been valuable. Also, a more formal critical appraisal of the most important quality domains would have helped

readers to gain a better sense of the reliability of the findings. The authors might have provided more uniform presentations of individual trials (perhaps with declarative titles and sections entitled benefit and harms, etc) and clarified a meta-analysis in acute lymphoblastic leukemia, which included 42 trials, most of which do not appear to be reviewed in the book. Also, they did not cite current management guidelines or summarize what was the contribution of these trials in these guidelines. These issues could be addressed, of course, in future editions.

I hope this book will provide the impetus to authors in other fields to publish similar compilations of the best evidence in their field. This is something that I have been contemplating for some time, and this book has provided the motivation to pursue it further.

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