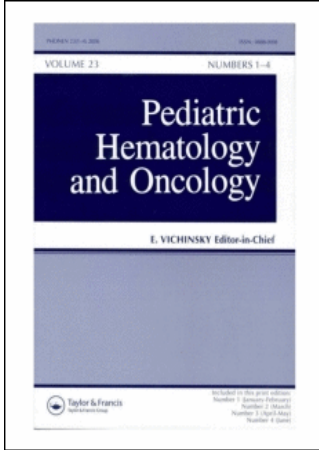


This article was downloaded by:[University of Iowa Libraries]
On: 25 July 2007
Access Details: [subscription number 764698238]
Publisher: Informa Healthcare
Informa Ltd Registered in England and Wales Registered Number: 1072954
Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Pediatric Hematology and Oncology Incorporating the International Journal of Pediatric Hematology/Oncology

Publication details, including instructions for authors and subscription information:
<http://www.informaworld.com/smpp/title~content=t713610311>

SCHEDULING FOR RADIOTHERAPY SIMULATION IN CHILDREN WITH A RENAL MASS

Heather S. Kaiser ^a; Arnold C. Paulino ^b; John M. Buatti ^a

^a Department of Radiation Oncology, University of Iowa Health Care, Iowa City,
Iowa, USA

^b Department of Radiation Oncology, Emory University, Atlanta, Georgia, USA

Online Publication Date: 01 April 2006

To cite this Article: Kaiser, Heather S., Paulino, Arnold C. and Buatti, John M.

(2006) 'SCHEDULING FOR RADIOTHERAPY SIMULATION IN CHILDREN WITH A

RENAL MASS', *Pediatric Hematology and Oncology*, 23:3, 275 - 276

To link to this article: DOI: 10.1080/08880010500506248

URL: <http://dx.doi.org/10.1080/08880010500506248>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article maybe used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

© Taylor and Francis 2007

Letter to the Editor

SCHEDULING FOR RADIOTHERAPY SIMULATION IN CHILDREN WITH A RENAL MASS

Heather S. Kaiser, MD □ *Department of Radiation Oncology, University of Iowa Health Care, Iowa City, Iowa, USA*

Arnold C. Paulino, MD □ *Department of Radiation Oncology, Emory University, Atlanta, Georgia, USA*

John M. Buatti, MD □ *Department of Radiation Oncology, University of Iowa Health Care, Iowa City, Iowa, USA*

Keywords radiotherapy, renal mass, simulation, Wilms tumor

To determine the feasibility of starting radiotherapy (RT) within 10 days of nephrectomy for Wilms tumor as mandated by the National Wilms' Tumor Study—5, we reviewed the records of 51 children seen at University of Iowa Hospitals and Clinics with a unilateral renal mass. Forty-four patients were able to undergo initial nephrectomy and comprise the subjects of this report. There were 22 boys and 22 girls, with a median age of 33 months (range, 1 day to 18 years). Information was collected regarding the date of nephrectomy (day 0), date of final diagnosis, tumor histology, stage, and requirement for anesthesia.

The median time to final diagnosis was 5 days (range, 2–21 days). Thirty-nine of 44 (88.6%) had a final diagnosis before day 10. All but 1 patient had a final diagnosis by day 14. The diagnosis was favorable histology Wilms tumor in 33 (75%), neuroblastoma in 3 (7%), and clear cell sarcoma in 3 (7%). Anaplastic Wilms tumor, renal cell carcinoma, mesoblastic nephroma,

Received 20 October 2005; accepted 2 December 2005.

This paper was presented in part at the 88th Scientific Assembly and Annual Meeting of the Radiologic Society of North America, 1–6 December 2002, Chicago, Illinois, USA.

Address correspondence to Arnold C. Paulino, MD, Department of Radiation Oncology, Emory Clinic, 1365 Clifton Road NE, Room A1300, Atlanta, GA 30322, USA. E-mail: arnold@radonc.emory.org or Apaulino@tmh.tmc.edu

PNET, and rhabdoid tumor were seen in 1 patient each. Of the 33 children with Wilms tumor, 22 were classified as stage I or II. Based on the above findings, 16 children would have required postoperative RT by day 10 to satisfy protocol compliance. Of these 16, 12 (75%) had a final diagnosis by day 10. In our institutional review, 25% of children would not have started RT by day 10 as final diagnosis was not available.

In the past, there has been some thought as to performing simulation in all patients with unilateral mass in the case that immediate RT is needed. However, our experience shows that 28 (63.6%) would not have required immediate RT. Furthermore, 19 of the 28 (67.9%) would have required anesthesia for the unnecessary simulation.

In the next Childrens Oncology Group studies, RT is recommended to start within 14 days of nephrectomy [1]. Based on data, delivering postoperative RT within this new limit should be feasible, as 15 of 16 patients requiring RT would have a diagnosis by day 14.

REFERENCE

- [1] Kalapurakal JA, Li SM, Breslow NE, et al. Influence of radiation therapy delay on abdominal tumor recurrence in patients with favorable histology Wilms' tumor treated on NWTS-3 and NWTS-4: a report from the National Wilms' Tumor Study Group. *Int J Radiat Oncol Biol Phys.* 2003;57:495-499.