Case Report

Urologia Internationalis

Urol Int 1996;57:108–109

Adil Esen[a]
Cem Güler[a]
Aydanur Kargı[b]
Ziya Kırkalı[a]

Departments of
[a] Urology and
[b] Pathology, Dokuz Eylül University School of Medicine, İzmir, Turkey

Cisplatin and Etoposide Chemotherapy in the Treatment of Adult Wilms' Tumor

Key Words
Chemotherapy, Wilms' tumor
Renal neoplasm
Wilms' tumor, chemotherapy

Abstract
A 64-year-old man underwent left radical nephrectomy for stage III anaplastic Wilms' tumor. He received adjuvant chemotherapy consisting of cisplatin and etoposide. Complete clinical response was achieved and maintained for 12 months. A systemic relapse after 1 year also responded to three more cycles of cisplatin and etoposide. Although cisplatin- and etoposide-based chemotherapy was not used as a first-line therapy in adult patients with Wilms' tumor described in the literature, this case demonstrates the promising activity of this combination also in adults with this disease entity.

Introduction

Cisplatin- and etoposide-based chemotherapy has been recommended for patients with Wilms' tumor who failed to respond or relapsed following a standard regimen consisting of actinomycin D, vincristine, and doxorubicin [1, 2].

These agents were also suggested for recurrent adult Wilms' tumor [3, 4]. To our knowledge, a cisplatin- and etoposide-based regimen has not been used as a first-line therapy in adult patients. We recently treated an adult patient with Wilms' tumor with cisplatin and etoposide. A relapse after 1 year also responded to three more cycles of etoposide.

Case Report

A 64-year-old man presented with a 1-month history of abdominal pain. Physical examination revealed a hard and nodular left renal mass. Laboratory investigations showed an elevated erythrocyte sedimentation rate (41 mm/h). Other biochemical and hematologic parameters were normal. Excretory urography showed a nonfunctioning right kidney with a soft-tissue mass lesion displacing the bowel.

Ultrasonography and computerized tomography of abdomen and pelvis demonstrated a 18 × 20-cm left renal mass which appeared to invade the tail of the pancreas and the psoas muscle. Multiple enlarged lymph nodes were present in para-aortic and retrocaval regions. These findings were also confirmed by magnetic resonance imaging (fig. 1). The patient underwent left radical nephrectomy and lymphadenectomy. At the time of the operation, the mass was seen not to invade the pancreas. Histopathologic examination revealed a poorly differentiated tumor diagnosed as anaplastic Wilms' tumor with lymph node and adrenal metastases (fig. 2). The disease was classified as stage III according to the National Wilms' Tumor Study classification [5].

The patient received combination chemotherapy consisting of cisplatin (20 mg/m^2 i.v.) and etoposide (100 mg/m^2/day i.v.) on days 1–5 to be repeated every 3 weeks. After two cycles of chemotherapy, a computerized tomography scan revealed no evidence of disease, and the complete response was maintained for 12 months. Neither chemotherapy nor radiation therapy was performed during this period. A systemic relapse occurred at the left cervical lymph node (10 × 10 cm) after 1 year which responded to three more cycles of etoposide over 9 weeks. We observed no treatment toxicity. The patient is now well and disease free 24 months after the diagnosis.

KARGER
E-Mail karger@karger.ch
Fax + 41 61 306 12 34
http://www.karger.ch

© 1996 S. Karger AG, Basel
0042–1138/96/0572–0108$10.00/0

Ziya Kırkalı, MD
Department of Urology
Dokuz Eylül University
School of Medicine
TR-35340 İnciraltı İzmir (Turkey)

Received:
November 8, 1995
Accepted after revision:
March 29, 1996



Fig. 1. Magnetic resonance image of the abdomen, showing a huge left renal mass.

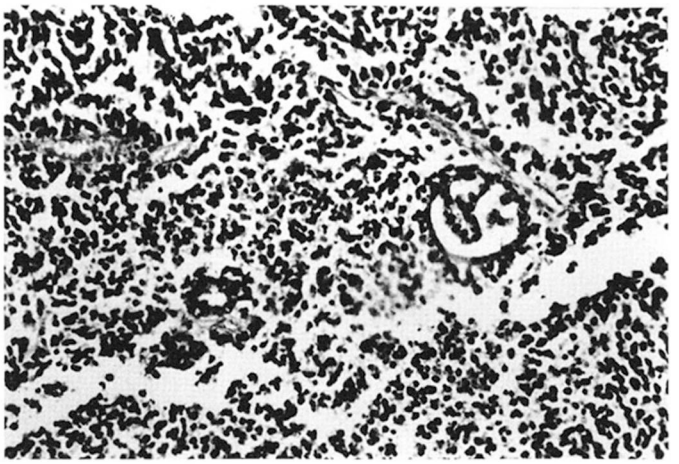


Fig. 2. Micrograph showing a poorly differentiated blastoma, and epithelial tubular and glomeruloid structures. HE. × 88.

Results

Wilms' tumors rarely occur in adults, with approximately 200 cases reported in the literature. The prognosis is poor in adults, as compared with children [6]. Arrigo et al. [7] found a 3-year survival rate of 67%. But this 3-year survival rate was 24% in all patients registered in the first National Wilms' Tumor Study and 11% for those with metastases [8]. This poor prognosis could be partially due to the fact that adults have more advanced disease at the time of diagnosis as compared with children. Actuarial survival rates of adults were worse than in children at the same stage [6].

It is suggested that other chemotherapeutic regimens which have been successfully used in pediatric patients with Wilms' tumor could be modified for the adult patients [3, 4, 9].

Cisplatin- and etoposide-based chemotherapy, one of the regimens used in children with recurrent tumor, has also been suggested for adult patients with recurrent Wilms' tumor [3, 4]. This regimen was also used as neoadjuvant chemotherapy prior to surgery in an adult patient [6]. Complete clinical response has been achieved in 3 cases. However, according to our knowledge, cisplatin- and etoposide-based chemotherapy has not been used as a first-line chemotherapy in adult Wilms' tumor. Our patient was treated with surgery and chemotherapy including cisplatin and etoposide, leading to a remission for 12 months. He is now alive and disease free 24 months after the diagnosis.

As we observed in our patient, aggressive local and systemic treatment may improve the survival of these patients. We conclude that cisplatin and etoposide chemotherapy should be evaluated as a good alternative in the treatment of adult Wilms' tumor.

References

1 Douglass EC, Williams JA, Sackey K, Casper J, Nitschke R: Efficacy of combination cisplatin and VP-16 in the treatment of recurrent and advanced Wilm's tumor. Proc Am Soc Clin Oncol 1985;5:210–214.

2 Pinkerton CR, Groot-Loonen JJ, Morris-Jones PH, Pritchard J: Response rates in relapsed Wilms' tumor: A need for new effective agents. Cancer 1991;67:567–569.

3 Sparano JA, Beckwith JB, Mitsudo S, Wiernik PH: Complete remission in refractory anaplastic adult Wilms' tumor treated with cisplatin and etoposide. Cancer 1991;67:956–959.

4 Abratt RP, Prez M, Kaschula R: Adult Wilms' tumor: Cisplatin and etoposide for relapse after adjuvant chemotherapy. Cancer 1990;65:890–892.

5 D'Angio GJ, Breslow W, Beckwith JB, Evans A: Treatment of Wilms' tumor: Results of the Third National Wilms' Tumor Study. Cancer 1989;64:349–360.

6 Hupperets PS, Havenith MG, Blijhan GH: Recurrent adult nephroblastoma. Cancer 1992; 69:2990–2992.

7 Arrigo S, Beckwith JB, Sharples K, D'Angio GJ, Haase G: Better survival after combined modality care for adults with Wilms' tumor. Cancer 1990;66:827–830.

8 Byrd R, Evans E, D'Angio GJ: Adult Wilms' tumor: Effect of combined therapy on survival. J Urol 1982;127:648–651.

9 Kattan J, Droz JP, Culine S, Escudier B, Raymond CB: Recombinant interferon alpha efficacy in relapsed adult nephroblastoma: A case report. J Urol 1994;151:411–412.