

Rhabdoid

1

2 3 4 5

: rhabdoid

: 7 rhabdoid
6 4 8 (: 1 6) 가 5 , 가 2
(CT) . CT
(renal hilum) , ,
I ,
II
: 3-12cm 가 4 ,
가 3 . I rhabdoid 4 (57%) ,
1 . II rhabdoid 3 (43%) ,

: rhabdoid
rhabdoid

Rhabdoid 6 4 8 1
(1), 가 5 , 가 2
(2,3). Rhabdoid 가 3 , 4 CT
4 CT ,
(4,5). Rhabdoid 3 CT 3
(4~8), MRI 2
CT rhabdoid 7 3 , MRI 1 4
가 CT X CT
CT (renal hilum) , , , ,
I

1992 9 1997 10 , CT rhabdoid ,
MRI 가 rhabdoid II rhabdoid
7

1 CT 3 가
2 3 1cm
3
4
5 ,

1999 1 18

1999 7 15

Rhabdoid

CT, 1 8, 1 CT

가 10

7, 4, Rhabdoid 2%

3 가 3-12cm Rhabdoid

가 4, 3 가 (muscle-like, cytoplasmic eosinophilia)

I rhabdoid (renal sinus) (rhabdomyosarcoma) (6,10).

4 (57%) 1 (myoglobin) (myosin)

(Fig. 1), 3 (7).

4 (Fig. 2). I rhabdoid 3 4 6 (11-16)

, 1 1 (30-36)

3 (100%) 2:1 (11,13).

2 (50%) 가

3 1 II rhabdoid

3 (43%) II rhabdoid 3

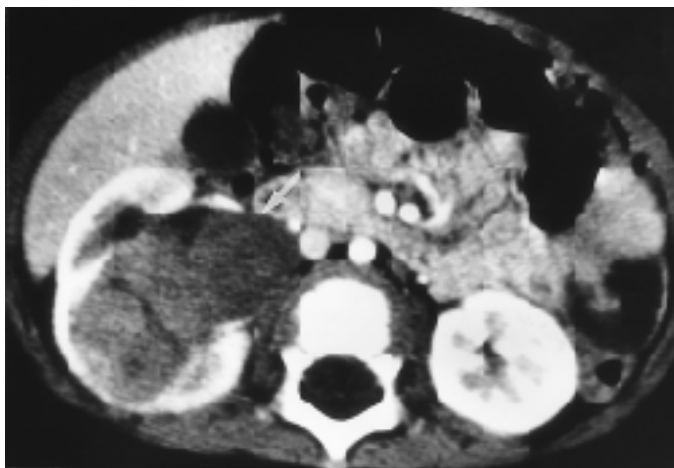
(stretching) (Fig. (4,14). Rhabdoid

3). 3 (100%) Beckwith-Wiedemann, Drash

2 (67%), 2 (67%) (가,), Soto

4 CT MRI 1 (), Rhabdoid

2 3-4 1

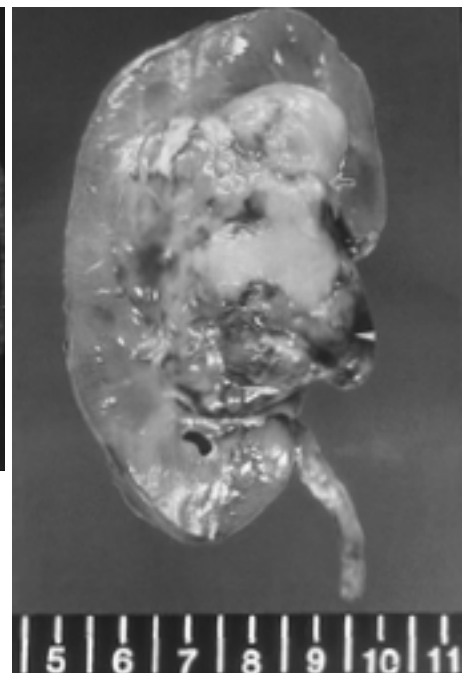


A

Fig. 1. Centrally located rhabdoid tumor in the right kidney (type I) in 12-month-old male infant.

A. Contrast-enhanced CT scan shows a poorly enhancing mass occupying the renal pelvis, which is protruding into renal hilum (arrow). No subcapsular hematoma is noted.

B. Cut surface of the gross specimen shows the mass (open arrow) that is confined in the renal sinus. Note involvement of renal hilum (arrowhead).



B

가 . (astrocytoma) (4,6).
 Agrons (4) rhabdoid 52%
 (PNET), (ependymoma) , Eftekhari (8)

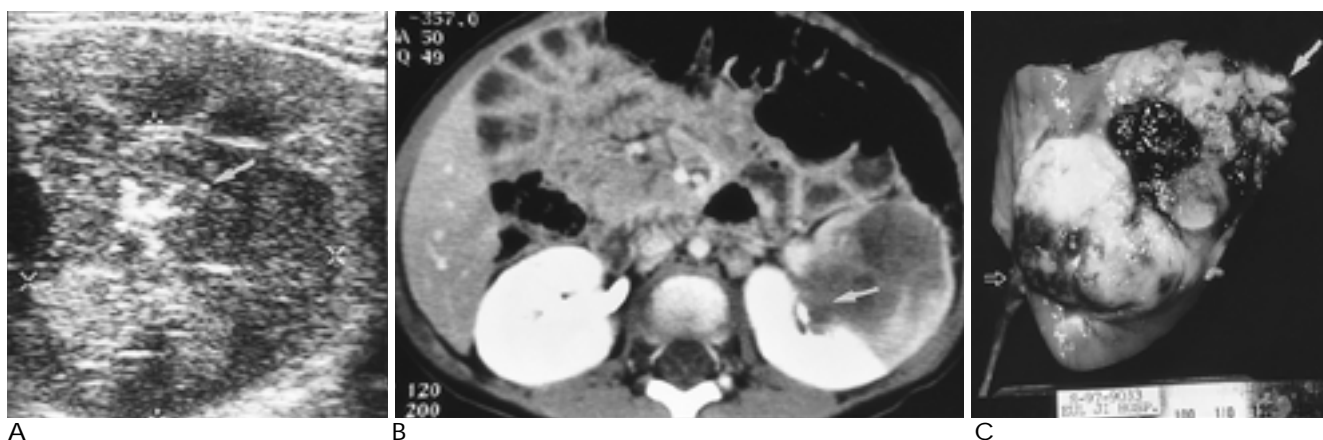


Fig. 2. Centrally located rhabdoid tumor with peripheral extension in 18-month-old girl.
 A. Transverse sonogram shows an inhomogeneous echogenic mass in the left kidney. Note tiny calcifications (arrow) in the tumor.
 B. Contrast-enhanced CT scan shows an intrarenal mass of low attenuation compare with the renal parenchyma. Note hilar involvement (arrow).
 C. Cut surface of the gross specimen shows the mass that arises from central portion of the kidney, invades the renal sinus and reaches the renal capsule (arrow). Also note invasion of the proximal ureter (open arrow).

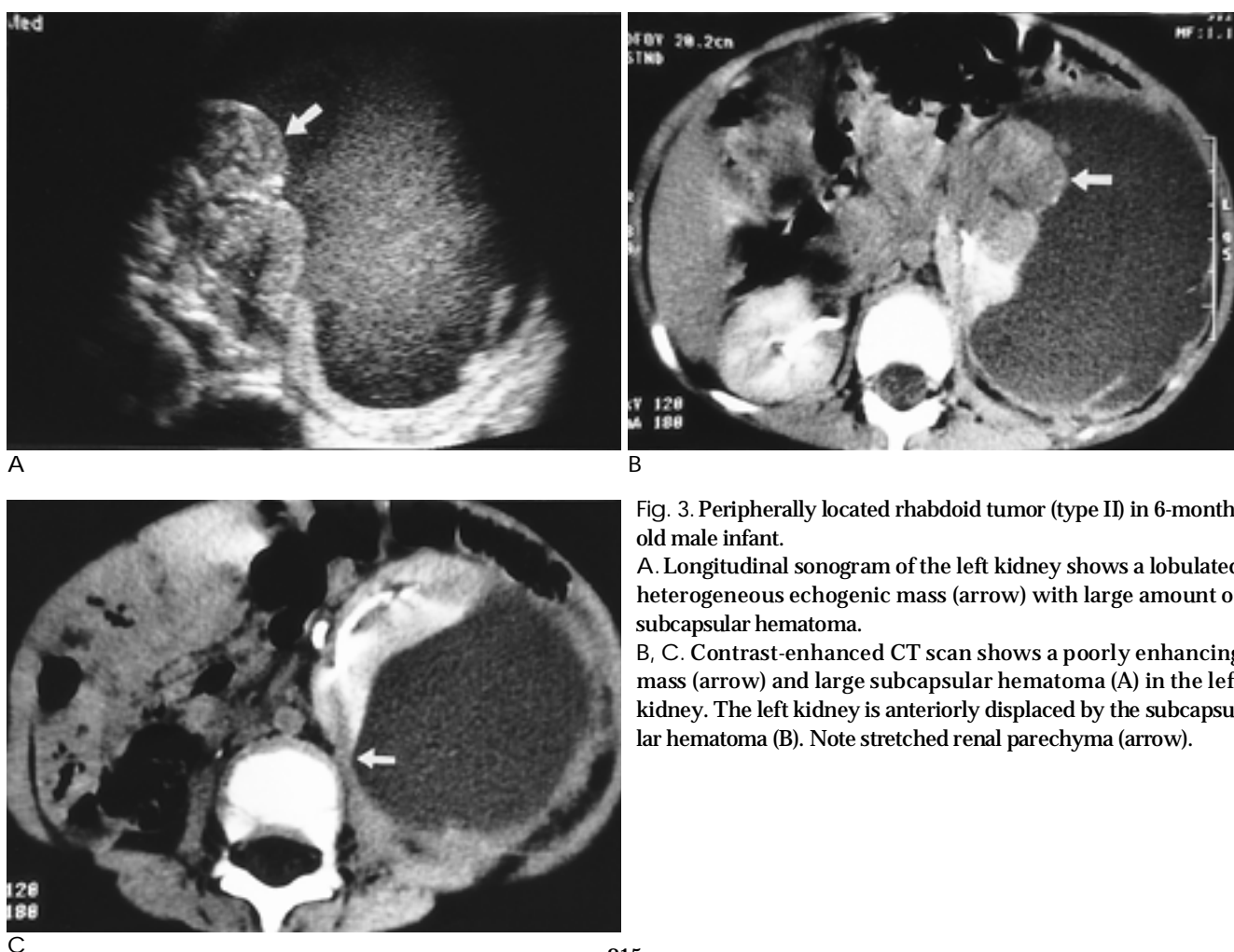


Fig. 3. Peripherally located rhabdoid tumor (type II) in 6-month-old male infant.
 A. Longitudinal sonogram of the left kidney shows a lobulated heterogeneous echogenic mass (arrow) with large amount of subcapsular hematoma.
 B, C. Contrast-enhanced CT scan shows a poorly enhancing mass (arrow) and large subcapsular hematoma (A) in the left kidney. The left kidney is anteriorly displaced by the subcapsular hematoma (B). Note stretched renal parenchyma (arrow).

13.5% CT MRI 4 6 가 Rhabdoid

1 가 rhabdoid (16). 3

Agrons (4) 18 rhabdoid 4 CT

16 2 rhabdoid 6%

Chung (6) 8 rhabdoid 3-5 가 25% 가 (17). 가 9-12 rhabdoid

4 3 가

(15) Agrons (4) 가 CT가

rhabdoid 21 15 (71%) 12%

Agrons (4) rhabdoid

2 . Chung (6) 8 rhabdoid

3 가

5 3 rhabdoid

I rhabdoid II rhabdoid

가 Chung (6) 8

3 , Agrons (4) 가

CT가 3 2 가 3 가 10%

Lowe (10) 3-4 80%가 가 (76%), (26%), (14%), (10%) (7). 4 2 가 3 , 4 2

CT가 , rhabdoid

가 CT MRI 가 (mesoblastic nephroma), (multilocular cystic nephroma), (clear cell sarcoma) (30 ~ 36)

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Imaging Features of Rhabdoid Tumor of the Kidney in Children¹

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Purpose: To evaluate the difference in radiologic features of rhabdoid tumor of the kidney (RTK) in children according to the location of the tumor within the kidney.

Materials and Methods: We retrospectively reviewed the radiologic findings of pathologically confirmed RTK in seven children (5 boys and 2 girls; age range, 6 months to 4 years 8 months; median, 18 months). All subjects underwent abdominal CT. We analyzed tumor location, size, and margin; renal hilar involvement, subcapsular hematoma, calcification, necrosis, and lymphadenopathy. RTK was classified according to the location of the tumor within the kidney: A tumor that mainly located in the central portion of the kidney with or without peripheral extension was described as type I, while one located at the periphery was type II. Imaging findings between the two types were compared.

Results: Tumor size varied from 3 cm to 12 cm. Tumor outlines were ill-defined in four cases but relatively well-defined in three. Four tumors (57 %) were type I. Hilar involvement was found in all four and a small subcapsular hematoma in one. Three tumors (43 %) were type II, and in all three, large crescent-shaped subcapsular hematomas were found.

Conclusion: Centrally located RTK showed hilar involvement with a small subcapsular hematoma, while in cases of peripherally located RTK, a large subcapsular hematoma was present. These findings may be helpful for the differential diagnosis of other pediatric renal tumors.

Index words : Kidney neoplasms, CT
Children, genitourinary system
Neoplasms, in infants and children

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