

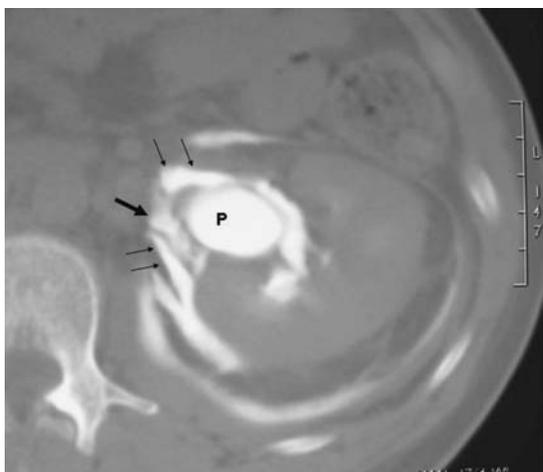
尿管周囲筋膜の構造の検討

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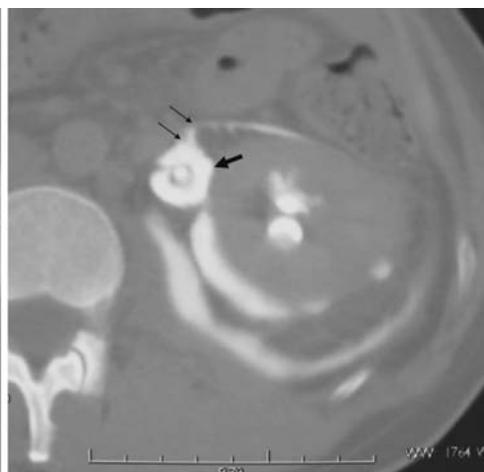
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尿管周囲の筋膜構造の詳細な報告はない^{1,2)}。我々は尿管周囲に腔を形成する筋膜構造の存在と腎周囲腔

内側面の筋膜構造を明らかにする CT を用いた臨床検討を行った。



a. CT through renal pelvis shows spread of contrast medium along the fascia (double arrows) around the renal pelvis (P) into the subcapsular portion and anterior and posterior interfascial plane. Note that contrast medium in the fat layer around the renal pelvis (arrow).



b. Scan shows that contrast medium in the space around the cranial portion of the ureter (arrow). Note that communication between the space around the ureter and anterior interfascial plane (double arrows).



c. Scan at the pelvic inlet shows that anterior renal fascia fuses with posterior renal fascia just lateral to the gonadal vein (G) and medial (double white arrows) to the ureter (arrow).

D: descending colon

Fig. 1 Extension of extravasated contrast medium from the left renal pelvis into the space around the left ureter in a 73-year-old man with ureter stone.

対象・方法

対象は既存構造を歪めることのない程度で尿の腎盂外溢流をきたした4症例（女性1例，男性3例，平均年齢68歳）である．全例左側病変で尿路造影で診断が確定された．原疾患は尿管結石3例，単純子宮摘出後が1例であった．CT施行は尿路造影前が1例，後が3例（直後2例）である．尿路外に漏出した造影剤及び液体の貯留状態や広がり，肥厚した筋膜の状態を詳細に検討した．筋膜は腎筋膜及び腎周囲腔の線維隔壁（bridging septa）に注目した．病変による腎・尿管周囲の変化は腎下極までが1例，骨盤部腹膜外腔（骨盤入り口までを含む）までが3例であった．

結 果

尿管は腎周囲腔内側面に位置していた（ $n=4$ ）．3例で漏出した造影剤が腎盂・頭側尿管周囲に貯留しており，腎皮膜下，腎筋膜前葉・後葉の筋膜間腔（interfascial plane）に広がっていた（Figs. 1, 2）．尿管周囲と前葉筋膜間腔の直接の交通が2例でみられた．漏出した造影剤が腎周囲腔をこえて内側へ進展した症例はなかったが，尿管周囲と腎筋膜後葉との連続性は明らかではなかった．骨盤入り口付近（ $n=3$ ）では腎筋膜が尿管を覆っていた（Fig. 1）．前葉と後葉は尿管内側で癒合し一体となり大血管に付着したものと（ $n=1$ ），尿管の外側で一部が癒合し他は別々に

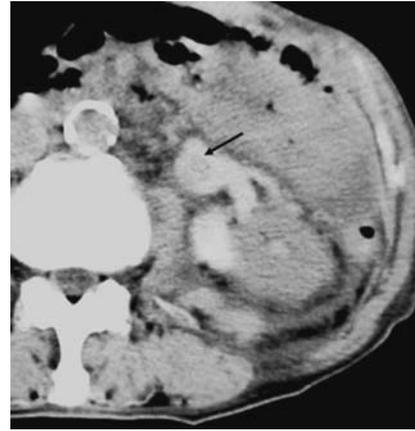


Fig. 2 Communication between the space around the ureter and anterior interfascial plane in a 86-year-old man. Note that ureter is identified as low density round mass in the contrast medium in the space around the ureter (arrow).

内側へ走行し大血管に付着したものがあった（ $n=2$ ）．

結 論

尿管は腎周囲腔内側面に位置しこれを閉鎖していた．頭側では線維隔壁からなる筋膜が尿管を取り囲み腔を形成した．尾側にいくにつれ線維隔壁にかわって，腎筋膜が尿管を囲んでいた．

文 献

- 1) Raptopoulos V et al: Medial border of the perirenal space: CT and anatomic correlation. *Radiology* **205**: 577-784, 1997
- 2) Gore RM et al: The great escape: interfascial decompression planes of the retroperitoneum. *Am J Roentgenol* **175**: 363-370, 2000

Fascial structures around the ureter

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We retrospectively reviewed CT findings in 4 patients with urine leaks. CT was performed before urogram in 1 patient and after in 3. Attention was paid to the fascial structures around the ureter, the renal fascia, and the relation between these structures.

Extravasated contrast medium accumulated in the space around the cranial portion of the ureter and extended into the subcapsular space and anterior and posterior interfascial plane in 3 patients. In 1 patient, a linear structure arising from the kidney surrounded the renal pelvis. In the pelvic inlet ($n=3$), the anterior and posterior renal fascia fused with each other in the lateral aspect of the ureter in 2 patients. These fascias had a medial extension; they surrounded the ureter and attached with central major vessels. In 1 patient, anterior renal fascia fused with posterior renal fascia in the medial aspect of the ureter and conjoined fascia extended into the abdominal aorta.

In the cranial portion, fascia consisted of bridging septa which made a space around the ureter. As the ureter runs caudally, the ureter is surrounded by the layers of anterior renal fascia anteriorly and posterior renal fascia posteriorly.

Key words: ureter, fascia, CT