

# Clinical diagnosis

## Case 360

### 4. Chronic urinoma

#### 【Progress】

Fever was getting down and laboratory test revealed no severe inflammation. Then, he was in the watchful state. He was scheduled to take CT several months later.

#### 【Discussion】

Urinoma is a cystic lesion arising from urine perforation from urinary tract secondary to tear or elevation of intra-urinary pressure by urinary tract obstructive versions. Iatrogenic catheter drainage insertion, traumatic injury or ureterolithiasis is causative of urine leakage (1-5). Urinary tract inflammation can cause urinoma formation as non-obstructive version (6, 7). Elevation of creatinine level in the fluids is greater than whole blood level is definitively diagnostic of urinoma (1).

Urinoma is found in perirenal space, anterior para-renal space or posterior para-renal space that can expand to psoas muscle and/or subcutaneous area. Urinoma formation in subcapsular space or intraperitoneal space rarely occurs. The symptoms of urinoma are listed: abdominal pain, lumbar pain, abdominal mass, and weight loss. It can be non-symptomatic because a very small quantity urine leakage gradually accumulates. When infectious urinoma occurs, it can induce abscess formation or sepsis (1).

CT is useful to present existence of urinoma and to make diagnosis of urinoma: the continuity of urinary tract to urinoma lumen. The urinary pelvis is often found to be inlet of urinoma, continuing urinoma lumen (2).

Urinoma is managed by several options, largely non-invasive treatment served (7). When it is small and stable, watching follow-up is possible. Large urinoma is drained by catheter via ureter or via percutaneous trans-renal approach. Direct percutaneous catheter drainage for retroperitoneal abscess. Urine culture is favorable to select effective antibiotics.

In our case, patient needs care for life-support with non-symptomatic. Our physician judged to be watchful follow-up based on CT findings of calcified cystic lesion with communication between pelvis and cystic lumen that indicates inactive inflammatory state and based on laboratory test of low level of CRP and white blood cell counts.

## **【Summary】**

We presented a seventy-seven-year-old male for high fever. Laboratory test revealed urine: occult blood 3+ protein 2+, blood: CRP 0.81mg/dL. CT revealed perirenal cystic mass with mural calcification, communicating between pelvis and cystic lumen, indicative of probable urinoma. It is borne in mind that creatinine level is higher in cystic fluid indicating urine than in whole blood. It is imperative to find out a communication route between cystic lumen and urinary tract on CT for diagnosis of urinoma.

## **【References】**

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2024.11.1