Role of ultrasound and computed tomagraphy in assessment of cystic renal disease

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Our study comprises 30 patients, 16 males and 14 female were referred from the Nephrology and Urology Departments and outpatient clinics of Benha University Hospitals with their ages ranged from 16-70 years old. All cases were examined clinically then U.S and C.T. were performed.This study included different types of cystic renal diseases such as simple cyst, infected cyst, renal abscess, uremic cyst, neoplastic cyst and autosomal dominant polycystic kidney disease.Most of simple renal cysts were discovered accidentally during routine examination, while infected cyst and renal abscess were commonly presented with loin pain and constitutional manifestations. Autosomal dominant polycystic kidney and neoplastic cyst commonly presented with haematuria. On the other hand, uremic cystic disease usually associated with history of dialysis for along duration.The sensitivity of US in the diagnosis of cystic renal disease was 70% while the sensitivity of CT about 90% and when combining the US and CT the sensitivity increased to 100%.Summary and ConclusionSo we can conclude, regarding diagnosis of cystic renal disease renal ultrasonography is an excellent, available, and safe preliminary screening examination. Its major advantage is its high safety, low cost and less patient discomfort. CT is indicated when US examination was indeterminate or technically inadequate due to oatient obesity or complex masses, also CT offers the advantages of less operator dependency, better resolution, and higher sensitivity and specificity, However it is often not available routinely in all institutions, is more expensive than ultrasound, often requires the use of intravenous contrast material and utilizes ionizing radiation with their hazards.So US and CT play an extremely important role in the diagnosis of renal cystic disease. Non-conclusive findings are more common in US than in CT, especially in atypical cysts owing to the complexity of the findings of the wall and content, CT. allows a superior anatomical definition and takes the advantage of using contrast medium. However, in some cases, the opposite ma) occur, so that the two techniques are complementary. Technical improvements will lead to a better spatial and contrast resolution and reduce current problems.