

## 短期引流對腎水囊酒精燒融術的影響評估 Evaluation of Short-term Drainage Prior to Percutaneous Ethanol Sclerotherapy in Simple Renal Cyst

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**PURPOSE:** To evaluate the efficacy and result of short-term drainage prior to the ethanol sclerotherapy in simple renal cyst.

**MATERIAL AND METHODS:** Eleven cysts in 11 patients (39–77 years old) were enrolled into the study. Indications were soreness, flank pain, mass sensation, hypertension and hematuria. Mean follow-up period was 21.1 months. CT-guided drainages of renal cysts were performed one day prior to the sclerotherapy. After the cystogram was obtained in all cases, 95% ethanol with 30–40% of the original cyst volume was used as a sclerosing agent on an inpatient basis. Maximum volume of the injected ethanol was 200 ml. Success was defined as complete when there was total ablation and partial when there was a recurrence of less than half the original cyst volume with the resolution of symptoms. Failure was defined as the recurrence of more than half of cyst volume and/or persistent symptoms.

**RESULTS:** Successful ablation was 100% with 8 patients (72.7%) complete ablation. Four (57%) and three (43%) showed free and improvement of soreness. In 9 patients with flank pain, 7 (78%) were free and 2 (22%) improved. Hypertension improvement was obtained in 2 patients (50%). Free in 1 (50%) and improvement in 1 (50%) of total 2 hematuria patients were found. Second intervention was required in 2 patients (18%). No major complication.

**CONCLUSION:** Percutaneous ethanol sclerotherapy of simple renal cyst is a safe, effective and minimally invasive procedure. Short-term drainage prior to the sclerotherapy can increase the successful rate.

## 水分子擴散影像做膀胱癌的診斷分期之應用

### The Application of Diffusion Weighted MR Imaging in Diagnosing T Stage of Urinary Bladder Cancer

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**PURPOSE:** Most of patients with urinary bladder cancer in Taiwan associate with uremia and these patients is contraindication in gadolinium injection. This study aims to prospectively evaluate the use of diffusion-weighted (DW) magnetic resonance (MR) imaging to determine the T stage of bladder cancer without the use of gadolinium.

**MATERIAL AND METHODS:** This study was approved by the local institutional review board. All patients gave written informed consent. Twenty patients with a total of 44 bladder tumors underwent MR imaging that included DW imaging. Two radiologists interpreted two image sets (ie, T1 and T2-weighted images, T1 and T2-weighted plus DW images). The staging criteria used on T2-weighted images were as usual. The staging criteria for DW images were following Takeuchi et al's study. The McNemar test was used to examine differences in accuracy, sensitivity, and specificity. Differences in the performance were analyzed by comparing the areas under the receiver operating characteristic curves (Az values).

**RESULTS:** The overall accuracy of T stage diagnosis was 67% for T2-weighted images alone, 88% for T2-weighted plus DW images. The overall accuracy, specificity, and Az for diagnosing T2 or higher stages were significantly improved by adding DW images ( $P < 0.01$ ).

**CONCLUSION:** T2 -weighted plus DW images provided useful information for evaluating the T stage of bladder cancer.