PREOPERATIVE DIAGNOSIS: , Bilateral renal mass.,POSTOPERATIVE DIAGNOSIS:, Bilateral renal mass.,OPERATION: , Right hand-assisted laparoscopic cryoablation of renal lesions x2. Lysis of adhesions and renal biopsy.,ANESTHESIA: , General endotracheal.,ESTIMATED BLOOD LOSS:, 100 Ml.,FLUIDS: , Crystalloid.,The patient was bowel prepped and was given preoperative antibiotics.,BRIEF HISTORY: , The patient is a 73-year-old male, who presented to us with a referral from Dr. X's office with bilateral renal mass and renal insufficiency. The patient's baseline creatinine was around 1.6 to 1.7. The patient was found to have a 3 to 4-cm exophytic right renal mass, 1-cm renal mass inferior to that, and about 2-cm left renal mass. Since the patient had bilateral renal disease and the patient had renal insufficiency, the best option at this time had been cryoprocedure for the kidney versus partial nephrectomy, one kidney at a time. The patient understood all his options, had done some research on cryotherapy and wanted to proceed with the procedure. The patient had a renal biopsy done, which showed a possibility of an oncocytoma, which also would indicate that if this is not truly a cancerous lesion, but there is an associated risk of renal cell carcinoma that the patient will benefit from a cryo of the kidney.,Risk of anesthesia, bleeding, infection, pain, hernia, bowel obstruction, ileus, injury to bowel, postoperative bleeding, etc., were discussed. The patient understood the risk of delayed bleeding, the needing for nephrectomy, renal failure, renal insufficiency, etc., and wanted to proceed with the

procedure.,DETAILS OF THE OR: ,The patient was brought to the OR. Anesthesia was applied. The patient was given preoperative antibiotics. The patient was bowel prepped. The patient was placed in right side up, left side down, semiflank, with kidney rest up. All the pressure points are very well padded using foam and towels. The left knee was bent and the right knee was straight. There was no tension on any of the joints. All pressure points were well padded. The patient was taped to the table using 2-inch wide tape all the way around. A Foley catheter and OG tube were in place prior to prepping and draping the patient. A periumbilical incision measuring about 6 cm was made. The incision was carried through the subcutaneous tissue through the fascia using sharp dissection. The peritoneum was open. Abdomen was entered. There were some adhesions on the right side of the abdomen, which were released using metz. Two 12-mm ports were placed in the anteroaxillary line and one in the midclavicular line. A gel porter was placed. Pneumoperitoneum was obtained. All ports were placed under direct vision, and the right colon was reflected medially. Duodenum was cauterized. Minimal dissection was done on the hilum and the Gerota's was opened laterally, and the renal masses were clearly visualized all the way around. Pictures were taken. Superficial biopsies were taken of 2 renal lesions using 3 different probes. The 2 lesions were frozen. The 2 probes were 2.4 mm and the other one was 3.1 mm in diameter. So the R3.8 and R2.4 long probes were used. Freezing/thawing, two cycles were done. The temperatures

were -131, -137, -150 and the freezing time was 5 and 10 minutes each and passive sign was done. The exact times or exact temperatures are on the chart. There was a nice ice ball with each freezing and with passive sign. The probes were removed.,The probes were placed directly percutaneously through the skin into the renal lesions.,After freezing/thawing, the probes were removed and to seal with Surgicel were placed. Pictures were taken after following total of 20 minutes were spent looking at the renal mass to make sure that there was no delayed bleeding. From the time the probes were removed, until the time the laparoscope was removed, was total of 30 minutes. So the masses were visualized for a total of 30 minutes without any pneumoperitoneum. Pneumoperitoneum was obtained again. Fibrin glue was placed over it just for precautionary measure. There was about a total of 100 mL of blood loss overall with the entire procedure. Please note that towels were used to prep off the colon and the liver to ensure there was no freezing of any other organ. The kidney was kept in the left hand at all times. Careful attention was drawn to make sure that the probe was deep enough, at least 3.5 to 4 cm in, to get the medial aspect of the tumors frozen. The laparoscopic vacuum ultrasound showed that there was complete resolution of these lesions. At the end of the procedure, after freezing/thawing and putting the fibrin glue, Surgicel, and EndoSeal, the colon was reflected medially. Please note that the perirenal fat was placed over the lesion to ensure that the frozen area of the kidney was not exposed to the bowel. Lap count was correct.

Please note that renal biopsy for permanent section was performed on the superficial aspect of the lesions. No deeper biopsies were done to minimize the risk of bleeding. The 12-mm ports were closed using 0-Vicryl and the middle incision. The hand-port incision was closed using looped #1 PDS from both sides and was tied in the middle. Please note that the pneumoperitoneum was closed using 0-Vicryl in running fashion. After closing the abdomen, 4-0 Monocryl was used to close the skin and Dermabond was applied.,The patient was brought to recovery in a stable condition.