Reviewer's report

Title: Cold Saline Irrigation of the Renal Pelvis During Radiofrequency Ablation of a Central Renal Neoplasm

Version: 7 Date: 20 December 2007

Reviewer: Michael P Porter

I am familiar with the literature and believe that this case meets one of the 7 criteria for evaluation in the journal: New associations or variations in disease processes

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is this case worth reporting?: Yes

Is the case report persuasive?: No

Does the case report have explanatory value?: Yes

Does the case report have diagnostic value?: No

Will the case report make a difference to clinical practice?: Yes

Comments to authors:

December 20, 2007

Journal of Medical Case Reports

Re: 'Cold Saline Irrigation of the Renal Pelvis During Radiofrequency Ablation of a Central Renal Neoplasm', by Jose Pablo Morales, Tarun Sabharwal, Marios Georganas, Renato Dourado, Declan Cahill and Andreas Adam

Dear Editors:

Thank you for the opportunity to review this case report describing a technique to protect the ureter from thermal injury during treatment of medial renal masses by radiofrequency ablation. My general and specific comments are included below.

General comments: This case report describes retrograde continuous infusion of cold saline via a ureteral catheter during RFA treatment of a nearly 4cm medial renal mass. The saline infusion was performed as an effort to protect the renal pelvis and proximal ureter from thermal injury. Overall, this report is well written, appropriately referenced, and contains all the necessary information and
radiographs for the reader to understand this technique. Though there are management aspects of this patient’s care that could be debated, the main point of the report was to describe a technique, so my comments will be limited to this.

Specific comments:

1. As the authors have acknowledged, this technique has been described previously in a peer reviewed journal (Wah TM, et al. J Vasc Interv Radiol. 2005 Nov;16(11):1551-5). The main difference in the current report is the use of saline as the cold irrigant, where the previous report described using a dextrose solution. Though I am unaware of evidence supporting one solution over the other, and I think either should work safely. Whether this affects the novelty of the current report is, in my opinion, an editorial decision.

2. The authors state or imply several times in the report that the cold saline infusion prevented injury to the ureter. Examples include “successfully avoided the risk of thermal injury” (abstract, last sentence), “reduce the risk of thermal injury” (last sentence, introduction) and “major complications may be avoided” (discussion, last paragraph). In my opinion, this overstates the evidence provided by a single case. Though this technique may do all of these things, a single case report by no means rises to the level of conclusive evidence. It is possible that this patient might have had the same outcome without cold infusion, and it is possible that this technique provided little or no protection against thermal injury to the adventitia and outer layers of the ureter where the blood supply resides. These statements should be rephrased.

3. This case report supports the conclusion that retrograde saline irrigation is technically straightforward and has the potential to protect the ureter when treating lesion adjacent to the pelvis or ureter, but further experience is needed to confirm this. The authors may believe that this technique prevented major complications and improved impedence in the tissue, but these conclusions are not supported by this single case. Though I realize that this is a subtle difference in framing the conclusions, I am concerned that as written it will be implied that this technique does prevent injury, which can not be concluded from a single case report.

Thanks once again for the opportunity to review this paper.

Sincerely,

Michael P. Porter, MD, MS
Assistant Professor of Urology
Adjunct Assistant Professor of Epidemiology
University of Washington
Staff Urologist
VA Puget Sound Health Care System
What next?: Accept after minor revisions

Quality of written English: Acceptable