Re: Percutaneous and Laparoscopic Cryoablation of Small Renal Masses

D. S. Finley, S. Beck, G. Box, W. Chu, L. Deane, D. J. Vajgrt, E. M. McDougall and R. V. Clayman

To the Editor: Patient age can be an influential factor in the success rate of surgery, especially with regard to comorbidities. It is arguable that the differences mentioned in this article could be due to patient age, since age differences between the 2 groups are not specified. Table 1 in the article shows that there were 24 lesions treated with laparoscopic cryoablation (LCA) in 19 patients, which indicates that there were patients with multiple tumors. The actual reason for higher hemorrhage rates experienced in the LCA group could be that a portion of patients in this group were treated with more than 1 probe. However, this detail is not stated clearly in the article. Although there may be no significant difference between the percutaneous cryoablation (PCA) and LCA groups, we can observe higher hemorrhage rates in the LCA group, since multiple interventions were applied on multiple tumors only in this group. If a new statistical analysis were conducted after removing the patients with multiple probes from both groups, hemorrhage rates, as stated by the authors, would be 0%. Thus, we can say that hemorrhage is due to the use of multiple probes rather than the type of treatment approach used.

Although longer hospitalization times and greater amount of narcotic use were observed more frequently in the LCA group, this finding could be attributed to the use of multiple probes and hemorrhage. In addition, as stated by the authors, PCA is predicted to be better in terms of patient comfort and shorter hospitalization time. However, we cannot claim that this outcome depends only on the type of treatment method.

Respectfully,

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Reply by Authors: We greatly appreciate the letter from Demirci et al and will attempt to answer their insightful queries by proceeding with a subgroup analysis of patients in whom only a single cryoprobe was used. We certainly agree that age differences can have a role in comorbidities and as shown in the table in our article, mean patient age in the percutaneous group (61.3 years) was significantly less (p = 0.015) than in the laparoscopic group (71). However, when we proceeded with the subgroup analysis of patients in whom only a single probe was used the age discrepancy was no longer of significance (60.5 years for the percutaneous group and 66.0 years for the laparoscopic group, p = 0.34).

With regard to clinically significant posttreatment bleeding, we agree that the use of multiple EndoCare (Irvine, California) probes is in our experience associated with more bleeding, upwards of 25%. In contrast, we have seen no significant bleeding when only a single probe is used. It is noteworthy that other investigators have reported only rare bleeding when multiple Galil Medical (Plymouth Meeting, Pennsylvania) 1.47 mm cryoprobes have been used. Lately we have begun using the Galil Medical probes and have similarly noted no need for transfusions when multiple probes have been deployed. We are unable to explain this difference at the present time. However, this observation has now become the focus of an ongoing laboratory study.
With regard to hospital stay and analgesic use, the single probe group subanalysis still favors the percutaneous approach. Indeed, among patients treated with only 1 probe the hospital stay was 1.0 days for the percutaneous group vs 2.1 days for the laparoscopic group \( (p = 0.004) \). Narcotic use was also lower, at 1.3 vs 13.3 morphine sulfate equivalents for the PCA vs LCA group. This decreased amount of postoperative analgesics was just shy of achieving statistical significance \( (p = 0.06) \). While the length of hospital stay is more impressive, we are well aware that the laparoscopic procedures were largely done before the percutaneous procedures, and this comparison could be flawed due to the retrospective nature of the study. However, with regard to analgesic use, we believe that this result would be less susceptible to variation with respect to chronology of treatment.

Given this subanalysis, we believe that our data quite strongly support the conclusion that patient comfort and hospitalization time are benefited greatly by the percutaneous approach. To be sure, a randomized study in this regard would provide the highest level of evidence. However, given our patient population, we doubt that we could complete a study of this type.

Re: Genitofemoral Nerve Injury After Laparoscopic Varicocelectomy in Adolescents

O. J. Muensterer


To the Editor: I read the article by Muensterer with interest. The author did not mention the indication for laparoscopic varicocele ligation in this cohort of boys with a median age of 14 years. The number and experience of the surgeons were also not given. In 2 patients following laparoscopic varicocele ligation using ultrasonic shears paresthesia occurred, affecting the genital branch of the genitofemoral nerve. What was the cremasteric reflex in these boys like? (There is no report in the literature so far.) The reason for introducing the more expensive technique using ultrasonic shears rather than simple (and inexpensive) clips was not given. This article underlines the necessity of including this temporary phenomenon into informed consent and—if one believes that the reported problem is really a problem—to perform laparoscopic varicocele ligation with clips without awaiting a prospective study.

Respectfully,

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Reply by Author: I appreciate the interest of Doehn regarding this study. The indications for the procedures were varicoceles associated with scrotal pain in most cases and, less frequently, testicular hypotrophy. According to the literature, scrotal pain is alleviated or reduced postoperatively in more than 90% of patients.\(^1\) Hypotrophy in adolescents is age dependent and present in less than 10% of patients in the age group studied.\(^2\) All operations were performed by 5 experienced pediatric surgeons.

While atrophy of the cremaster fibers has indeed been associated with varicocele,\(^3\) the clinical implication of this finding remains uncertain, and data on the presence or absence of the cremasteric muscle were not included in this study. Use of the ultrasonic shears was dependent on physician preference. The main advantage is the ability to cut and coagulate at the same time, making instrument changes during the procedure unnecessary. While I do not perform varicocele ligation with ultrasound shears anymore, I believe that more prospective data are needed before universal recommendations on varicocele ligation methods should be made.