

Commentary


Robot assisted laparoscopic retroperitoneal lymph node dissection in testicular tumor

In this report, the authors present a case of a young man with Stage Ib testicular non-seminomatous germ cell malignancy. The patient ultimately received adjuvant therapy in the form of a robotic-assisted laparoscopic retroperitoneal lymph node dissection (RPLND). The authors describe their surgical technique, the patient's short-term outcome and provide a limited discussion of some of the pertinent (and contentious) issues surrounding primary RPLND and specifically robotic-assisted RPLND.

In terms of the technical details outlined by the authors, I would provide a few comments. While they describe sparing all the lumbar vessels, it is my opinion that while this is technically feasible, I would caution against doing so at the expense of the full resection of all lymphatic tissue behind the great vessels. Additionally, full retraction of the liver is vitally important to fully expose the right renal vessels and dissect all the necessary hilar lymphatic tissue. While the authors mention using fixed external retraction by a surgical assistant, it must be understood that when the robotic surgeon is remotely located at the console, there can easily be clashing with any fixed rigid instrument at the bedside which, in this case, may lead to a liver injury. In terms of the port placement, while this is a

matter of surgeon preference, I would encourage spending time pre-planning for port placement as the third robotic arm can be of great assistance in grasping and elevating the lymph node packet and allowing for two arms to work on meticulous dissection. These authors describe their placement as suboptimal and thus rendering the third arm useless. It is a good rule of surgical technique not to operate with "one arm tied behind your back."

While the authors certainly deserve congratulations for their fine surgical work, which appears to fulfill all the requirements demanded by a primary RPLND, I do think there are a few important points worth mentioning. First, there is no question that minimally-invasive RPLND is technically feasible as seen by the many reports in the literature (Article References 1-4). However, I must re-emphasize, that regardless of approach, primary RPLND is a therapeutic operation and thus not a staging procedure. The minimally-invasive operation must mimic the open approach and remove all lymphatic tissue in the described surgical template, not simply select suspicious nodes or easily accessible tissue in the template.^[1] Second, as a primary RPLND it is important that the surgeon adhere to the template and appropriate nerve-sparing to achieve the high rates of preserved antegrade ejaculation seen in the open experience.^[2,3] Lastly, in terms of patient management after primary RPLND, it should again be mentioned that this is a therapeutic cancer operation, and thus N0 patients should be observed and N1 patients should be offered observation as a preferred option in accordance with National Comprehensive Cancer Network guidelines.^[4] Even in N1 disease, we know that up to 75% of these patients are cured with a thorough primary RPLND alone.^[5] In limited, short-term reports, it appears that

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these outcomes with observation can also be accomplished with minimally-invasive RPLND.^[6] In summary, the surgery itself, the post-operative management, and the long-term outcomes of minimally-invasive RPLND should strive to replicate the experience with the open approach.

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