Video-assisted left inguinal lymphadenectomy for penile cancer

Cesar Araujo Britto, Rafael Batista Rebouças, Tassilo Rodrigo Araujo Lopes, Thiago Silva da Costa, Rodrigo de Carvalho Holanda Leite, Pedro Sales Lima de Carvalho

Urology Department, Onofre Lopes University Hospital, Federal University of Rio Grande do Norte, Natal, Brazil

ABSTRACT

Background: Penile cancer is a rare disease, most commonly encountered in developing countries. It constitutes 0.4% of cancers in U.S. men and 2.1% in Brazil, with the highest prevalence in the North and Northeast regions. Inguinal lymph node metastasis of penile cancer occurs in 20 to 40% of patients and is an important predictor of cancer-specific mortality. The preferred diagnostic and therapeutic tool to assess the regional lymph nodes is a lymphadenectomy which can, in addition to establishing staging, offers curative potential.

Materials and Methods: A 44 years old man, previously u to underwent a partial penectomy for penile cancer, whose pathology showed a moderately differentiated squamous cell carcinoma with neural and angiolymphatic invasion and negative surgical margins. The pathologic stage of the primary tumor was pT3NxMx. Following a one month course of oral antibiotics, the patient underwent a video-assisted bilateral inguinal lymphadenectomy. In the present video, we highlight the left video-assisted inguinal lymphadenectomy.

Results: Seventeen lymph nodes were dissected on the left side, two of them positive for cancer without extracapsular extension. On the right side, fourteen lymph nodes were dissected and one was positive for cancer with extracapsular extension, and the patient underwent based on these pathological findings a pelvic lymphadenectomy, which was similarly conducted using a video-assisted laparoscopic approach.

Conclusions: The conventional open lymphadenectomy has a morbidity that can approach 50% in the current series, despite on the refinements in technique. The video-assisted endoscopy is a recent technique aiming to decrease this inherent complication rate promoting a lymph node resection rate which may be equivalent to the open procedure. This video confirms its feasibility, reduced morbidity, and cancer control efficacy.

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Correspondence address:
Dr. Cesar Araujo Britto
Urology department,
Onofre Lopes University Hospital,
Federal University of Rio Grande do Norte
R. Ver. João Alves da Silva Filho,784, Tirol
Natal, RN, 59014-530, Brazil
E-mail: cesarbritto@hotmail.com
EDITORIAL COMMENT

In this video, Britto et al. nicely depict that video-assisted laparoscopic inguinal lymph node dissection is a safe and effective diagnostic and therapeutic tool for penile cancer. This minimally invasive approach follows the same anatomical landmarks and surgical principles well established to impart a successful oncologic outcome and minimize morbidity within our penile cancer patient cohort. I am pleased to see the authors have selected a case ideally suited for such a minimally invasive approach namely a patient without palpable inguinal adenopathy and exhibiting high-risk features within the primary penile tumors (i.e. lymphovascular invasions, pT1G3, > 50% poorly differentiated tumor). The authors should be applauded for their technical expertise and high-quality depiction of a surgical approach which will likely be integrated in our established surgical armamentarium to evaluate and treat inguinal lymph nodes in appropriately selected penile cancer patients. Herein lies the key, careful patient selection remains the primordial deterrent of whom should be offered such an approach at the present time. Video assisted laparoscopic inguinal lymph node dissection should not be offered to patients with bulky inguinal lymph node metastases (> 4 cm) and/or in the setting of neoadjuvant or salvage chemotherapy until prospective data can validate the oncologic equivalence of such a minimally invasive approach. These patients more than likely have a single therapeutic window of potential curability and failure to ensure complete locoregional tumor eradication by open superficial and deep inguinal lymph node dissection and likely pelvic lymph node dissection is doing a disservice to your patient although the intent of minimizing perioperative morbidity maybe noble. The art of surgery lies not in the discovery of novel surgical technologies or approaches but rather in applying them to appropriately selected cases in which the therapeutic outcomes can optimized.

Dr. Philippe E. Spiess
Assistant Professor of Urologic Oncology
H. Lee Moffitt Cancer Center
Tampa, Florida, USA
E-mail: philippe.spiess@moffitt.org