

Port-Site Metastasis: The Influence of Biology

Ralph A. Highshaw^a, Funda Vakar-Lopez^b, Eric Jonasch^c,
Alan W. Yasko^d, Surena F. Matin^{a,*}

^aDepartment of Urology, University of Texas, M.D. Anderson Cancer Center, 1515 Holcombe Blvd., Houston, TX 77030, USA

^bDepartment of Pathology, University of Texas, M.D. Anderson Cancer Center, 1515 Holcombe Blvd., Houston, TX 77030, USA

^cDepartment of Genitourinary Medical Oncology, University of Texas, M.D. Anderson Cancer Center, 1515 Holcombe Blvd., Houston, TX 77030, USA

^dDepartment of Surgical Oncology, University of Texas, M.D. Anderson Cancer Center, 1515 Holcombe Blvd., Houston, TX 77030, USA

Accepted 22 November 2004

Available online 9 December 2004

Abstract

Objective: Several surgical and technical mechanisms have been proposed for the development of port-site metastasis, but the influence of tumor and host biologic factors has not been emphasized. We present a case of a pelvic chordoma that metastasized to a prior laparoscopic radical nephrectomy port-site.

Methods: A 62-year-old woman underwent laparoscopic radical nephrectomy (LRN) for a pT1b grade 3 renal cell carcinoma, followed 6 weeks later by resection of a sacral chordoma. The incisions and areas of dissection for the two procedures were discontinuous.

Results: Eight months following the LRN she developed a nodule in one of the laparoscopic port-sites. The port-site metastasis was treated with wide surgical resection, which was confirmed as metastatic chordoma on histologic examination.

Conclusion: Based on the chronological sequence and physical distance between surgical sites, only biological factors could have contributed to this port-site metastasis. This unusual case highlights the important role that tumor and host biologic mechanisms play in the development of port-site metastasis.

© 2004 Elsevier B.V. All rights reserved.

Keywords: Laparoscopy; Metastasis; Wound complications; Renal cell carcinoma; Chordoma

1. Introduction

Port-site metastasis is rare. It appears to occur with the same frequency as implantation in open incisions. Surgical technique and laparoscopic factors such as carbon dioxide insufflation may play a role in the development of port-site metastasis, but some data suggest that tumor and host biologic factors exert a greater influence than surgical technique alone [1]. We present a case that, on the basis of the sequence and the distance between the surgical sites performed, illustrates the role of tumor and host biologic factors rather

than surgical technique in the development of port-site metastasis.

2. Case presentation

A 62-year-old woman was incidentally found to have a 6-cm, left renal tumor and a biopsy-proven 9-cm pelvic chordoma (Fig. 1A, B). At our institution, she underwent retroperitoneal laparoscopic radical nephrectomy (LRN) for a grade 3, conventional renal cell carcinoma (RCC) with negative surgical margins (pT1b N0 M0 R0, Grade 3). The entrapped, intact specimen was extracted through a high left Gibson incision. Dissection was confined to the upper retroperitoneum in anticipation of pelvic surgery. Six

* Corresponding author. Tel. +1 713 792 3250; Fax: +1 713 794 4824.
E-mail address: surmatin@mdanderson.org (S.F. Matin).

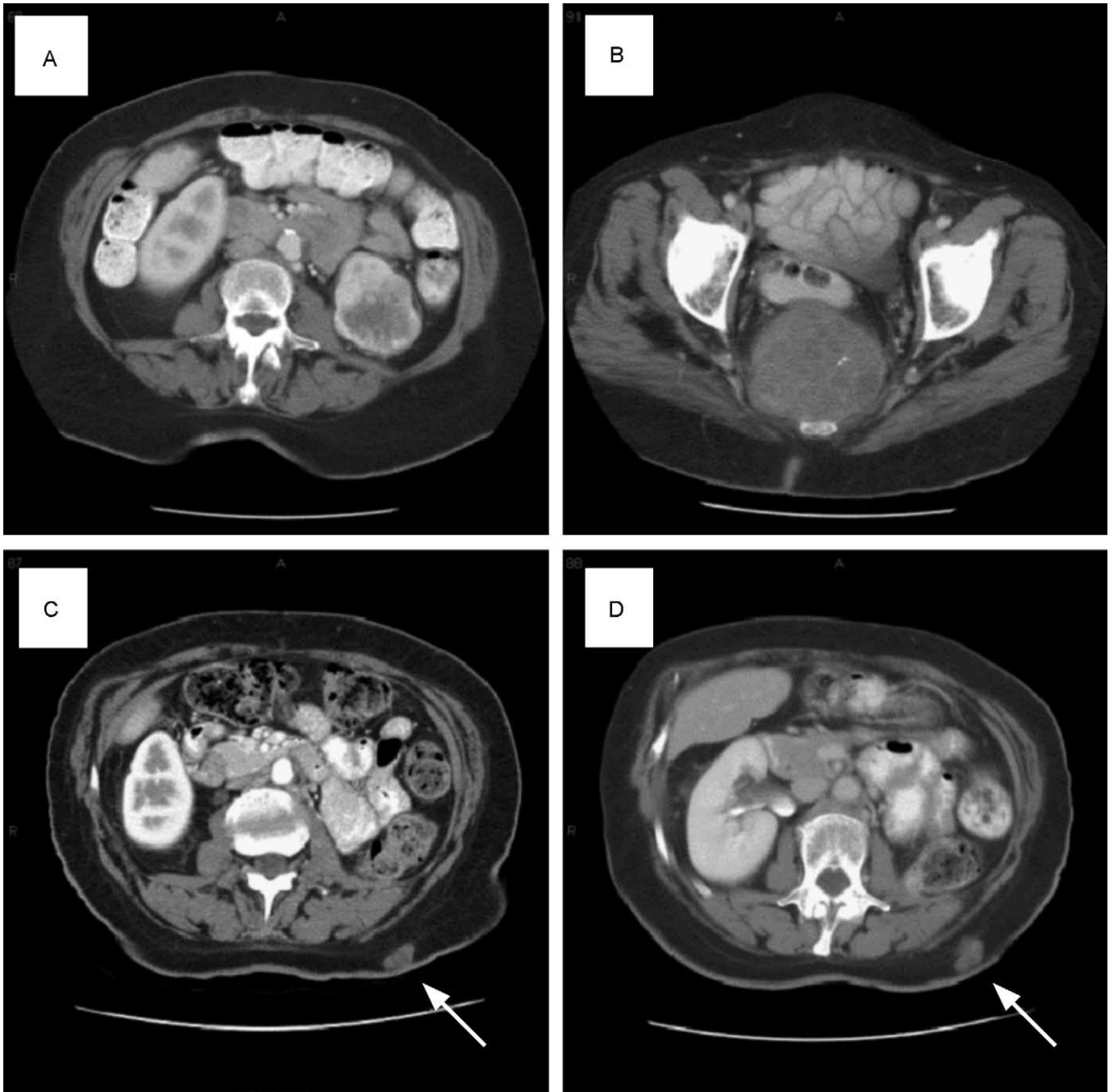


Fig. 1. Abdominal and pelvic computed tomography showing (A) primary left renal tumor, (B) primary sacral chordoma, and (C) and (D) metastatic chordoma in subcutaneous flank tissue in area of prior posterior port site used for initial laparoscopic retroperitoneal radical nephrectomy.

weeks later, the patient underwent a subtotal sacrectomy via an anterior and posterior approach, joined via the right side, to remove the sacral chordoma. Both procedures were performed without complications, and the incisions and areas of dissection were all discontinuous.

Two months after the original LRN, new pulmonary nodules were found and confirmed by fine needle aspiration to be metastatic RCC. Immunotherapy was initiated with interferon-alpha. Eight months later,

the patient had experienced a complete response but noted a palpable subcutaneous nodule in her left flank corresponding to the posterior port-site incision made during LRN (Fig. 1C, D). A fine-needle aspiration biopsy of the nodule was performed, and examination of the aspirate suggested chordoma. The patient underwent wide radical resection, and a diagnosis of metastatic chordoma was confirmed histologically (Fig. 2). Eighteen months after the original LRN, there was no evidence of local recurrence at the port-site or in the

Download English Version:

<https://daneshyari.com/en/article/9319398>

Download Persian Version:

<https://daneshyari.com/article/9319398>

[Daneshyari.com](https://daneshyari.com)