Cervical and upper mediastinal lymph node metastasis from gastrointestinal and pancreatic neuroendocrine tumors: the true incidence and their management

Yi-Zarn Wang DDS, MD, George Mayhall, Lowell Anthony MD, Richard Campeau MD, J. Philip Boudreaux MD, and Eugene Woltering MD
Louisiana State University Health Sciences Center, Department of Surgery, Section of Surgical Oncology and Endocrine Surgery, New Orleans LA 70112

Introduction

The incidence, clinical importance and optimal management of cervical and upper mediastinal lymph node metastasis from gastrointestinal (GI) and pancreatic neuroendocrine tumors (NETS) are largely unknown. Historically, they have been regarded as asymptomatic and ignored. We hypothesized that these lesions have clinical implications, and should be surgically removed.

Methods

Consecutive OctreoScans performed at our institution from May 2008 to October 2010 were reviewed in order to determine the incidence of these nodal metastases, and surgically treated patient’s charts were reviewed to evaluate their clinical importance and the subsequent outcome of surgical treatment.

Results

161 patients presented with positive OctreoScans. Fourteen (8.7%) patients scanned positive for cervical and upper mediastinal lymph node metastasis. Seven patients underwent surgical exploration; six had successful removal of their metastatic nodes. Five patients had clinical symptoms that were resolved by surgery.

Conclusion

The incidence of cervical and upper mediastinal lymph node metastasis from GI and pancreatic NETS is 8.7%. In the past, these metastases were ignored. Our study clearly demonstrates that most, if not all, such metastases are symptomatic and their clinical implications should not be overlooked. Notably, these metastases can be easily and safely resolved by radio-guided surgery.