

Stereotactic Body Radiotherapy for Metastasis to the Pancreas

Nergiz Dagoglu¹, Anand Mahadevan², Sule Karaman³

1. Radiation Oncology, Istanbul University, Istanbul School of Medicine, Istanbul, TUR 2. Department of Radiation Therapy, Beth Israel Deaconess Medical Center 3. Radiation Oncology, Istanbul University Faculty of Medicine, Istanbul, TUR

✉ **Corresponding author:** Nergiz Dagoglu, ndagoglu@istanbul.edu.tr

Categories: Radiation Oncology, Gastroenterology

Keywords: stereotactic body radiotherapy, pancreas, renal cell carcinoma, pancreatic metastases

How to cite this abstract

Dagoglu N, Mahadevan A, Karaman S (June 16, 2016) Stereotactic Body Radiotherapy for Metastasis to the Pancreas. Cureus 8(6): a38

Abstract

Objectives: Metastatic disease to the pancreas is rare with an incidence 2-11% in autopsy series. RCC is the most common primary metastases to pancreas followed by colon cancer, melanoma, sarcoma, and lung cancer. Surgical resection may not be feasible or indicated and systemic therapy is generally used. There is limited data for using radiotherapy for metastases to the pancreas. In this study, we aim to report our experience for SBRT in treatment of metastatic diseases to pancreas.

Methods: Between January 2010 and January 2015, 12 patients with metastatic disease to pancreas were treated with SBRT. The Cyberknife™ Robotic SBRT system with implanted fiducial based real time tracking was used in all cases. Patients were followed with a CT of the abdomen one month after treatment and periodically thereafter at the discretion of the oncologist.

Results: 5 females and 7 males with 12 lesions were included in this series. The median age was 64 years (50-79). The primary disease was renal cell carcinoma in 7 patients, cholangiocarcinoma in 2 patients, melanoma in 2 patients and colorectal in 1 patient. The median dose was 24Gy (24-36) and the median number of fractions was 3 (3-5). The mean prescription isodose was 77%, covering at least 95% of the target volume with a median maximum dose to the tumor of 32.87 Gy. There were 2 local failures after SBRT including 1 isolated local failures with a crude local control rate of 83%. Five patients eventually developed metastatic disease. The median overall survival was 10 months. Most patients developed fatigue. No grade 2 or greater toxicity was noted.

Conclusions: Metastatic to the pancreas is rare and surgical resection may not be feasible or indicated. In addition to systemic therapy, SBRT can be a safe and effective technique to achieve local control and alleviate symptoms.

Open Access

Abstract

Published 06/16/2016

Copyright

© Copyright 2016

Dagoglu et al. This is an open access article distributed under the terms of the Creative Commons Attribution License CC-BY 3.0., which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Distributed under

Creative Commons CC-BY 3.0