## Early treatment response of a rare papillary tumor of the pineal region after primary proton-beam therapy using the raster-scanning technique at HIT

Daniel Habermehl, Florian Blachutzik, Swantje Ecker, Jan-Oliver Dittmar, Stefan Rieken, Jürgen Debus, Thomas Welzel, and Stephanie E Combs

Department of Radiooncology, University Hospital of Heidelberg, Heidelberg, Germany

## ABSTRACT

Pineocytomas are rare intracranial tumors occurring in the pineal gland region. The curative therapy of choice is gross total resection, which cannot be performed in all patients because of the frequent eloquent location of these tumors. Percutaneous fractionated radiotherapy is an alternative treatment approach that may result in high local control rates. Nevertheless, our knowledge of this tumor entity is limited and based on retrospective case series only. We present a patient with a papillary tumor of the pineal region who was treated with highly conformal proton-beam therapy at the Heidelberg Ion Therapy Center (HIT) using the raster-scanning technique.

**Key words:** particle therapy, proton beam therapy, raster scanning technique, HIT, pineocytoma, pinealis tumor.

Correspondence to: Daniel Habermehl, MD, Dept of Radiooncology, University Hospital of Heidelberg, INF 400, 69120 Heidelberg, Germany. email daniel.habermehl@med. uni-heidelberg.de

Received November 21, 2011; accepted March 23, 2012.