

# Enhancement of pancreatic cancer on dynamic CT: Does it correlate with angiogenesis and fibrosis?

July 16 2009

---

Prognosis of pancreatic cancer is poor. Recently, it has been clarified that the grade of tumor angiogenesis is a useful prognostic marker in human cancer, including pancreatic cancer. To establish the grade of tumor angiogenesis by non-invasive imaging may be important clinically. However, there are only a few such reports on pancreatic cancer.

The present study, lead by Dr. Hattori and her colleagues from Kanazawa University Graduate School of Medical Science, has recently been published on July 7, 2009 in the *World Journal of Gastroenterology*. The study investigated the relationship between enhancement on dynamic CT and vascular endothelial growth factor and microvessel density as indicators of angiogenesis, and the extent of fibrosis.

Tumors with strong angiogenesis tended to show high enhancement in the arterial dominant phase. On the other hand, tumors with a larger amount of fibrosis showed a negative correlation with the grade of enhancement during the arterial phase. There was a significant correlation between enhancement on conventional dynamic CT and angiogenesis in [pancreatic cancer](#). However, dynamic CT features that are caused by angiogenesis may be modified by the extent of intratumoral fibrosis.

For the present, anti-angiogenesis agents are still not approved for the treatment of pancreatic cancer. However, as a preliminary investigation

for future clinical application, prediction of the grade of angiogenesis by conventional dynamic multidetector CT, which is most often performed for the diagnosis of pancreatic cancer, would be useful clinically.

More information: Hattori Y, Gabata T, Matsui O, Mochizuki K, Kitagawa H, Kayahara M, Ohta T, Nakanuma Y. Enhancement patterns of pancreatic adenocarcinoma on conventional dynamic multidetector row CT: Correlation with angiogenesis and fibrosis. World J Gastroenterol 2009; 15(25): 3114-3121, [www.wjgnet.com/1007-9327/15/3114.asp](http://www.wjgnet.com/1007-9327/15/3114.asp)

Source: World Journal of Gastroenterology  
([world-journal-of-gastroenterology/](http://world-journal-of-gastroenterology/)" rel="news">news : [web](#))

Citation: Enhancement of pancreatic cancer on dynamic CT: Does it correlate with angiogenesis and fibrosis? (2009, July 16) retrieved 25 April 2024 from <https://medicalxpress.com/news/2009-07-pancreatic-cancer-dynamic-ct-angiogenesis.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.