



FROM VISION TO DECISION

SEMINAR FRIDAY 13.05.2016

MedViz Facilities, Møllendalsbakken 7, 5th floor, 12:00-13:00



Functional imaging for individualizing endometrial cancer treatment

Professor Ingrid H.S. Haldorsen MD, PhD, Prof

Introduction

Abstract:

At this seminar researchers from Bergen Gynecologic Cancer Research Group and Bergen Abdominal Imaging Research Group will present novel ongoing imaging projects. Endometrial cancer is the most common gynecologic malignancy in industrialized countries, and the incidence is increasing. The projects presented today aim to promote individualized therapy by developing better diagnostic imaging methods that may be used to improve risk stratification and tailor therapy in endometrial cancer patients.



Postdoc. Vikram Rao Bollineni MD, PhD

High diagnostic value of FDG-PET/CT in endometrial cancer: Systematic review and meta-analysis of the literature

Abstract

FDG-PET/CT has long been used successfully for evaluation of several malignancies including endometrial cancer. Based on a systematic review, we here report diagnostic indices of FDG-PET/CT for preoperative prediction of lymph node metastases and for detection of disease recurrence after surgery with curative intent in endometrial cancer patients.



PhD-candidate Anna Berg MD

Tissue and imaging biomarkers for hypoxia predicts poor outcome in endometrial cancer

Abstract

Hypoxia is a hallmark of neoplastic growth and frequent in solid tumors. We explore HIF-1 α protein expression in endometrial cancer in relation to preoperative functional imaging markers reflecting tumor microvasculature and metabolism. We assess patients with complex atypical hyperplasia (CAH) and primary endometrial cancer (EC) by immunohistochemistry (n=827), gene expression arrays (n=282), FDG-PET/CT (n=129) and DCE-MRI (n=185). We found stromal expression of HIF-1 α to correlate to total lesion glycolysis (TLG) (p=0.02). Also, blood flow assessed by MRI is significantly anti-correlated to a hypoxic gene signature (p=0.007).



PhD-candidate Sigmund Ytre-Hauge MD

In vivo MR spectroscopy predicts high tumor grade in endometrial cancer

Abstract

Magnetic resonance spectroscopy imaging (MRSI) enables quantification of tumor metabolites in vivo. Choline-containing metabolites play a key role in tumor metabolism. We aimed to explore whether high risk histological features are reflected in MRSI parameters derived from preoperative MRI (1.5T) in 77 endometrial carcinoma patients. The most clinically relevant finding in this study, is the ability of MRSI to predict tumor grade, which is an established risk factor in endometrial cancer. Hence, we conclude that in vivo 1H MRSI may aid in the preoperative tumor characterization for risk stratified surgical treatment.

