



FROM VISION TO DECISION

SEMINAR FRIDAY 28.09.12

PLACE: Aud. 2, BBB

TIME : 12:00-13:00

TITLE:

Imaging at The Norwegian Multiple Sclerosis National Competence Centre

SPEAKERS:

1. Multiple Sclerosis and imaging in the clinical practice. Kjell-Morten Myhr, Prof. MD.
2. A clinical MS-study (OFAMS) and MRI analysis with FreeSurfer. Ørjan Bergmann, PhD.
3. Animal models in multiple sclerosis. Stig Wergeland, MD.
4. Myelin quantification using MTR in animal models. Sveinung Fjær, MS.

ABSTRACT

Multiple Sclerosis (MS) is a chronic inflammatory disease of the central nervous system. It is the most common non-traumatic reason for invalidity in young adults and has a prevalence of about 7000 in Norway. Magnetic resonance imaging (MRI) is a part of the diagnostic criteria of MS. Lesions in the brain and the spinal cord are detectable in T2 images and in T1 Images with gadolinium contrast.

The Norwegian Multiple Sclerosis National competence Centre (MS-centre) is located at the department of neurology. Its main responsibility is to promote research and supervise and educate doctors and healthcare professionals in Norway.

We will present the range of imaging work done at the MS-centre, from quantitative animal MRI studies to imaging used in the clinical practice. Starting with an overview of the disease and the current clinical imaging practice. Continuing with a clinical study, Omega-3 Fatty Acid Treatment in Multiple Sclerosis (OFAMS), and the use of FreeSurfer to do analysis of MR images of MS-brains. We will then go over to preclinical studies and present two animal models used in our studies, the cuprizone model and experimental autoimmune encephalomyelitis (EAE), and look at how these models can be used to validate quantitative MR imaging modalities, specifically monitoring myelin change using Magnetization Transfer Ratio

