## Report from a lecture

The NFH XXV Nordic Meeting took place in Oslo on Aug 31 and Sept 1. Many highly appreciated lectures were held and one of them was "Long Term Oral and Dental Complications after Young Age Cancer". It was Kristine Eidal Tanem from the Department of Oral Surgery and Oral Medicine, Faculty of Dentistry, at the University of Oslo who gave the lecture.

As an introduction Kristine gave a background of the most common types of cancer at a young age. The treatment for different types of cancer is constantly evolving and this means that an increasing number of cancer survivors will need dental care many years later. In Norway, approximately 210 cases of cancer are discovered annually in individuals under the age of 18. Leukaemia and central nervous system cancer are the most common types of cancer in the younger population. In the case of leukaemia, the treatments are continuous for several years and it will be stressful for the body, with many side effects. In some cases, it is indicated with stem cell transplantation and before this also conditioning treatment. CNS tumours are treated primarily with surgery, but sometimes radiation is also necessary. The side effects of both chemotherapy and radiation effects many parts of the body, since also healthy cells undergoes excessive apoptosis.

Kristine focused on the long-term effects that we as dental care personnel may have to consider. It is common for children treated for cancer to be hospitalized for long periods of time and for them to find it difficult to eat and take care of their oral hygiene. This in turn leads to an increased risk of caries. Radiation therapy can lead to trismus and radiation necrosis. Chemotherapy and radiation can also lead to dental development disturbances and Kristine showed several photos and panoramic radiographs of this complication. We also learned about GVHD (Graft Versus Host Disease), a condition that can occur after bone marrow transplantation, and that since 2014 has been classified as a precancerous condition. It has also been shown that long term survivors of childhood cancer have a higher risk than others of developing oral cancers later in life.

Kristine then informed about her own research where one of the aims has been to Investigate oral and dental late effects in long term survivors of cancer treatment at young age. The investigation has shown that both taste and smell were impaired in those treated for young age cancer. Trismus was also common and 30.4% had dental development disturbances.

The same study group of survivors were also evaluated regarding cognitive impairment. The result showed that radiation therapy to the developing brain is associated with a higher risk of different types of cognitive impairment, learning disabilities, memory problems and neuropsychiatric conditions. Kristine pointed out that it is of importance to take this into account when we meet cancer survivors, but she also told that new techniques with proton radiation are being developed, which is expected to reduce the risk of this problematic side effect.

The auditorium then received some take home messages:

- Survivors of cancer treatment at a young age experience several oral and dental late effects many years after treatment.
- The risk is increased when the patient is treated at a very young age (<5 years).
- Oral healthcare personnel should be a part of the interdisciplinary team that provides follow-up care for cancer survivors.

At the end of the lecture, Kristine got some interesting questions, both about the effects of radiation to the jawbone, but also about the conflicting dietary advice that nutritionists give in connection with cancer treatment.

Kristine received a big round of applause and then the audience went on to the hotel's excellent restaurant and had a tasty lunch.

Erik Helander, member of the NFH Swedish board.