Palliative-D – Can vitamin D supplementation reduce symptom burden for palliative cancer patients?

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Aim: To perform a randomized, double-blind, placebo controlled, multi-center trial to test the hypothesis that vitamin-D supplementation to palliative cancer reduces pain, infections and fatigue, and improves self-reported quality of life.

Background

Vitamin D supplementation to patients with vitamin D deficiency may have beneficial effects on pain, infections, and well-being without any significant side effects.

Vitamin D status is measured as S-25-OHD, and levels below 50 nmol/L are considered to be insufficient. Cancer patients generally have lower 25-OHD-levels than healthy controls.

Results from a pilot study at our centre showed a significant reduction in opioid dose for palliative cancer patients treated with cholecalciferol compared to controls.

Method

- A randomized, double blind, placebo controlled multi-centre trial
- 254 palliative cancer patients with S-25-OHD < 50 nmol/L, recruited from palliative home care teams
- **Intervention:** Randomization 1:1 to Cholecalciferol 4000 IE/day or placebo for 12 weeks.
- Start Oct 2017, end Dec 2019

Data collection

- Type of cancer, age, sex
- Blood sample for biobank
- S-25-OHD before/after intervention
- S-CRP, S-electrolytes
- Opioid dose
- Antibiotic treatment
- ESAS, EORTC-15-QLQ-PAL

Conclusion

We hope that this RCT will give us sound evidence regarding the use of cholecalciferol in palliative care. At end of study we will have baseline data and biobanked blood samples from more than 500 palliative cancer patients.