Taste and Smell Changes in Childhood Cancer Patients - a Longitudinal Study

Published: 14-11-2019 Last updated: 16-02-2024

Smell and taste function change during chemotherapy consequently affecting 1) dietary

intake 2) eating behavior 3) anthropometry 4) quality of life

Ethical review Not applicable

Status Recruitment stopped

Health condition type Other condition

Study type Observational non invasive

Summary

ID

NL-OMON29173

Source

NTR

Brief title

SENSORY-2

Condition

• Other condition

Health condition

Childhood cancer patients (all types)

Research involving

Human

Sponsors and support

Primary sponsor: Princess Máxima Center

Source(s) of monetary or material Support: Princess Máxima Center, Maastricht

University

Intervention

Outcome measures

Primary outcome

Taste function (sample size calculation)

Secondary outcome

Smell function Subjective smell and taste function Dietary intake Eating behavior Anthropometry Quality of life Sensory processing

Study description

Background summary

Children with cancer experience chemosensory changes (i.e., changes in their sense of taste and smell) during the course of treatment. Irradiation of head and neck, and administration of chemotherapeutic agents induce these changes. This is an often overlooked but still important treatment symptom as it contributes to poor food intake which in turn may cause malnutrition and affect prognosis. The central aim of this project is to elucidate smell and taste changes in childhood cancer patients during - and after chemotherapy. Furthermore, consequences of smell and taste changes regarding dietary intake, eating behavior, anthropometry, and quality of life will be assessed. The reasons for examining children with cancer (as opposed to adults) are that (1) there is very little known of the impact cancer treatment has on children's sense of taste and smell and how this affects food intake and food preferences directly and on the longer term; (2) dietary habits and flavour preferences are still developing in children and thus the impact of chemotherapy-induced smell and taste changes is, presumably, much larger in childhood cancer patients.

Study objective

Smell and taste function change during chemotherapy consequently affecting 1) dietary intake 2) eating behavior 3) anthropometry 4) quality of life

Study design

4 1) 6 weeks after start of chemotherapy 2) 3 months after start of chemotherapy 3) 6 months after start of chemotherapy 4) 3 months after stop of chemotherapy

Intervention

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Contacts

Public

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Scientific

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Eligibility criteria

Age

Children (2-11 years)

Children (2-11 years)

Adolescents (16-17 years)

Adolescents (16-17 years)

Adolescents (12-15 years)

Adolescents (12-15 years)

Inclusion criteria

- Diagnosed with any form of childhood cancer - Between 6 and 18 years old at the start of treatment - Receiving chemotherapy - Able to understand the Dutch language (both child and parents)

Exclusion criteria

- Children with isolated congenital anosmia (ICA; a complete loss of smell) - Children ≤ 5 years - Children and parents that do not understand the Dutch language - Children with a self-reported allergy to quinine

Study design

Design

Study phase: N/A

Study type: Observational non invasive

Intervention model: Other

Allocation: Non controlled trial

Masking: Open (masking not used)

Control: N/A, unknown

Primary purpose: Supportive care

Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 01-11-2020

Enrollment: 120

Type: Actual

IPD sharing statement

Plan to share IPD: No

Ethics review

Positive opinion

Date: 27-12-2019

Application type: First submission

Review commission: METC Erasmus MC, Universitair Medisch Centrum Rotterdam

(Rotterdam)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register ID

NTR-new NL8165

Other METC UMCU: METC 19/809

Study results