

# Treatment of Cancer in the Head and Neck:

## The Role of Hyperbaric Oxygen in Reducing Swallowing Problems

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**Primary Study Objectives:** This study tries to objectives the potential benefit of prophylactic HBOT in terms of reducing / limiting the amount of dysphagia and / or xerostomia for tumors in the head and neck, specifically originating from the...

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Pending
<b>Health condition type</b>	Miscellaneous and site unspecified neoplasms benign
<b>Study type</b>	Interventional

### Summary

#### ID

NL-OMON39489

#### Source

ToetsingOnline

#### Brief title

HBOT in Head & Neck Cancer

#### Condition

- Miscellaneous and site unspecified neoplasms benign

#### Synonym

Dysphagia/Swallowing

#### Research involving

Human

#### Sponsors and support

**Primary sponsor:** Erasmus MC, Universitair Medisch Centrum Rotterdam

**Source(s) of monetary or material Support:** Ministerie van OC&W

## **Intervention**

**Keyword:** Dysphagia, Hyperbaric oxygen, Radiotherapy, Side-effect

## **Outcome measures**

### **Primary outcome**

Quality of Life of the patients (dysphagia, xerostomia)

Quality of Life

The assessment of QoL will be performed using disease-specific aspects, that is the Performance Status Scale for Head and Neck cancer (PSSHN) 22. The performance status scale includes the daily core activities: ability to eat in public, normalcy of speech, and normalcy of diet. The eating in public subscale assesses the impact of eating function disturbances on the social integration of the patient by reporting restrictions of settings and people present during food intake. The understandability of speech subscale rates the degree to which the interviewer is able to understand the patient's speech. The normalcy of diet subscale assesses the food the patient is able to eat, with categories spanning the range from normal diet to no-oral feedings. The three subscales are rated from 0 to 100, with 100 representing normal function.

The EORTC QLQ-C30 and the EORTC QLQ-H&N35 and MDADI questionnaires will also be used during the protocol to assess the Quality of Life. Finally, the 4 items of the score card should be scored with every outpatient clinic visit.

### **Secondary outcome**

The actuarial Local-Regional Control (LRC) rate, Disease Free Survival (DFS), and Overall Survival (OS) rates will be calculated. Kaplan Meijer Curves will be generated.

## Study description

### Background summary

Positive pilot study in reducing side-effects after radiation treatment in head and neck cancer patients.

### Study objective

Primary Study Objectives:

This study tries to objectives the potential benefit of prophylactic HBOT in terms of reducing / limiting the amount of dysphagia and / or xerostomia for tumors in the head and neck, specifically originating from the nasopharynx and oropharynx. Moreover, given that patients with tumors in the hypopharynx and the T3-4 tumors of the larynx also complain of dysphagia and xerostomia, frequently occurring late side effects, the HBO prophylactic treatment might also apply to these tumors.

#### Dysphagia

- Can HBO reduce the amount of RT-induced dysphagia in patients with cancer of the head and neck?

#### Xerostomia

- Can HBO reduce the amount of RT-induced xerostomia in cancer of the head and neck?

#### Trismus

- Can HBO reduce the amount of surgically and / or RT-induced trismus in cancer of the head and neck?

## Grade 3/4 (WHO) Mucositis

- Can HBO reduce the amount of RT-induced mucositis in cancer of the head and neck?

### Secondary Study Objectives:

- What is the local/regional control / (overall) survival in patients with cancer of the head and neck (standard protocol) with or without HBO

## Study design

Included patients will be randomized in receiving yes or no hyperbaric oxygen treatment.

## Intervention

Hyperbaric oxygen treatment.

## Study burden and risks

Patients will receive an additional treatment of hyperbaric oxygen sessions of 30 x 2 hours a day.

## Contacts

### Public

Erasmus MC, Universitair Medisch Centrum Rotterdam

Groene Hilledijk 301

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### Scientific

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## Trial sites

## Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

- Patients with histological proof of squamous cell carcinoma of mucous membranes of the oropharynx, oral cavity, nasopharynx, hypopharynx and larynx to be treated with curative intent
- Karnofsky score of 70 or higher
- Age  $\geq 18$  years
- Written informed consent given prior to start of the treatment protocol

### Exclusion criteria

Pregnant woman

Heart injection fraction of  $< 30\%$

COPD or lungemphysema

Infection in the upper airways

Recent middle ear surgery

Recent thorax surgery

Uncontrolled fever

Severe epilepsy

Carefulness with claustrophobic patients

Carefulness in patients with a medical history pneumothorax, thorax surgery or epileptic insults,

## Study design

### Design

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial  
Masking: Open (masking not used)

**Primary purpose:** Prevention

## Recruitment

NL  
Recruitment status: Pending  
Start date (anticipated): 01-09-2012  
Enrollment: 80  
Type: Anticipated

## Medical products/devices used

Product type: Medicine  
Brand name: Conoxia  
Generic name: Oxygen  
Registration: Yes - NL outside intended use

## Ethics review

Approved WMO  
Date: 29-06-2012  
Application type: First submission  
Review commission: METC Erasmus MC, Universitair Medisch Centrum Rotterdam (Rotterdam)

Approved WMO  
Date: 15-11-2012  
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
Other	25123615
EudraCT	EUCTR2012-001416-27-NL
CCMO	NL39443.078.12