# The psychosocial determinants of stress(vulnerablity) and cognitive complaints in breast cancer patients receiving elective radiotherapy

Published: 01-07-2008 Last updated: 07-05-2024

The primary aim of this study is to identify the psychosocial determinants of stress (vulnerability) and cognitive complaints in breast cancer patients treated with adjuvant radiotherapy. The stress model of Taylor and Aspinwall will be used.

Ethical review Approved WMO

**Status** Recruitment stopped

**Health condition type** Miscellaneous and site unspecified neoplasms benign

**Study type** Observational non invasive

## **Summary**

#### ID

NL-OMON31975

#### **Source**

**ToetsingOnline** 

#### **Brief title**

Cognitive complaints after elective radiotherapy for breast cancer

#### **Condition**

- Miscellaneous and site unspecified neoplasms benign
- Cognitive and attention disorders and disturbances
- Breast disorders

#### **Synonym**

breast cancer; breast carcinoma

#### Research involving

Human

## **Sponsors and support**

Primary sponsor: TweeSteden ziekenhuis

Source(s) of monetary or material Support: Geen financiering

#### Intervention

**Keyword:** cancer, cognition, radiotherapy, stress

#### **Outcome measures**

#### **Primary outcome**

Subjective cognitive complaints

#### **Secondary outcome**

n.a.

# **Study description**

### **Background summary**

Several studies have found cognitive impairment in subgroups of patients treated with chemotherapy, based on data of predominantly breast cancer patients. Studies on cognitive sequelae of radiotherapy are scarse, but show that cognitive complaints can also occur after this treatment modality. No correlation has been found between cognitive impairment scores en cognitive complaints. Cognitive complaints were related to anxiety and depression scores. Little is known about the psychosocial predictors of cognitive complaints and the relationship with stress-vulnerability in breast cancer patients.

## **Study objective**

The primary aim of this study is to identify the psychosocial determinants of stress (vulnerability) and cognitive complaints in breast cancer patients treated with adjuvant radiotherapy. The stress model of Taylor and Aspinwall will be used.

#### Study design

Women with a palpable lump in the breast visiting the TweeSteden Hospital (Tilburg) during the period May 2008 and January 2011, are asked to participate in the study. They all complete questionnaires at baseline. Only women, who are

diagnosed with breast cancer and receive elective radiotherapy participate further in the study. Completion of questionnaires (demographic factors, personality factors (only at baseline), self esteem, depressive symptoms, anxiety, fatigue, social support, perceived stress and coping) will occur before diagnose and 3, 6 and 12 months after ending radiotherapy. Patients fill in the questionnaires at home. Data will be analyzed with univariate regression analyses (ANOVA, ANCOVA). With an alpha set at 0.05 and a power of .80 a sample size of 77 is needed. A large effect size is tolerated.

Possible results: This study can provide more insight in the relationship between a life threatening disease i.e. breast cancer, relevant psychosocial factors, stress (vulnerability) and subjective cognitive complaints. Patients can be provided with information relating experienced cognitive problems to emotional distress and subsequent interventions can address a patient\*s specific stressors and promote effective coping strategies.

#### Study burden and risks

n.a.

## **Contacts**

#### **Public**

TweeSteden ziekenhuis

Postbus 90107 5000 LA Tilburg NL

#### **Scientific**

TweeSteden ziekenhuis

Postbus 90107 5000 LA Tilburg NL

## **Trial sites**

#### **Listed location countries**

Netherlands

# **Eligibility criteria**

#### Age

Adults (18-64 years) Elderly (65 years and older)

#### Inclusion criteria

Women, who are for the first time diagnosed with breast cancer and receive elective radiotherapy.

## **Exclusion criteria**

Alcohol- or drugsabuse
No Dutch speaking
Radio- or chemotherapy before
Neurological or psychiatric history
Medication that can influence cognitive functioning

# Study design

## **Design**

Study type: Observational non invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Basic science

#### Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 01-05-2008

Enrollment: 77

Type: Anticipated

## **Ethics review**

Approved WMO

Application type: First submission

Review commission: METC Brabant (Tilburg)

# **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

CCMO NL22005.028.08