# Studying esophageal pressure characteristics using high-resolution manometry: A comparison between solid state catheters and water-perfused catheters

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Therefore, the aim of this study is to determine normal-values for esophageal pressure characteristics using a water-perfused high-resolution manometry catheter. Furthermore, we aim to compare pres

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| **Ethical review** | Approved WMO |
| **Status** | Recruitment stopped |
| **Health condition type** | Gastrointestinal motility and defaecation conditions |
| **Study type** | Observational non invasive |

## Summary

### ID

NL-OMON39369

**Source**
ToetsingOnline

**Brief title**
A comparison between solid state catheters and water-perfused catheters

### Condition

- Gastrointestinal motility and defaecation conditions

**Synonym**
manometry

**Research involving**
Human

## Sponsors and support

**Primary sponsor:** Academisch Medisch Centrum
**Source(s) of monetary or material Support:** Ministerie van OC&W

## Intervention

**Keyword:** esophagus, Manometry

## Outcome measures

### Primary outcome

Resting pressure of the lower esophageal sphincter

### Secondary outcome

LES relaxation pressure

Distal contractile amplitude

# Study description

### Background summary

Since the introduction of esophageal manometry in the mid 1950s many different manometric systems have been introduced. The current gold-standard for measuring esophageal pressure characteristics is the so-called high-resolution manometry which refers to catheters with 1-cm manometric sensor spacing at the position of the esophagogastric junction. Two different catheters are currently available for clinical practice 1) catheters with water-perfused pressure sensors, the so-called water-perfused catheters and 2) catheters with solid-state pressure sensors, the so-called solid-state catheters. The current classification for esophageal motility disorders as well as normal values for high-resolution manometry have all been developed using solid-state catheters. Normal-values for water-perfused high-resolution catheters are not available and it is currently unknown whether pressure levels as measured by solid-state catheters are different from water-perfused catheters.
sure levels as measured by solid-state catheters with water-perfused catheters.

### Study objective

Therefore, the aim of this study is to determine normal-values for esophageal pressure characteristics using a water-perfused high-resolution manometry

catheter. Furthermore, we aim to compare pres

### Study design

A comparative study using solid-state high-resolution manometry catheters and water-perfused high-resolution manometry catheters.

### Study burden and risks

none

## Contacts

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## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

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

### Inclusion criteria

Written informed consent
Minimum age: 18 years

### Exclusion criteria

Gastrointestinal complaints

## Study design

### Design

**Study type:** Observational non invasive

| | |
|---|---|
| Masking: | Open (masking not used) |
| Control: | Uncontrolled |
| Primary purpose: | Diagnostic |

### Recruitment

NL

| | |
|---|---|
| Recruitment status: | Recruitment stopped |
| Start date (anticipated): | 31-05-2013 |
| Enrollment: | 31 |
| Type: | Actual |

## Ethics review

Approved WMO

| | |
|---|---|
| Date: | 19-02-2013 |
| Application type: | First submission |
| Review commission: | METC Amsterdam UMC |

## 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 | NL39310.018.11 |