

# Gastrointestinal ischemia in patients with portal vein thrombosis

<b>Submission date</b> 16/02/2015	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 19/02/2015	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 23/04/2015	<b>Condition category</b> Circulatory System	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Portal vein thrombosis (PVT) refers to a blockage of the portal vein (the blood vessel supplying blood to the liver from the intestines) by a blood clot. It often leads to portal hypertension, where the blood pressure in the portal vein is higher than it should be. PVT can occur suddenly (acute) or chronic (which results from acute PVT that does not respond to treatment).

Gastrointestinal ischemia, caused by a fall in the blood flow to the intestines, is a feared complication of PVT. It can result in intestinal infarction, a life-threatening complication where parts of the bowel start to die due to lack of a blood supply (and therefore oxygen) that often requires immediate surgery. Treatment of acute PVT therefore aims at vascular recanalization (reopening blocked blood vessels), to prevent portal hypertension and gastrointestinal ischemia. Due to the rarity of the disease and lack of adequate diagnostic tools in the past, most data on gastrointestinal ischemia in patients with PVT stem from studies using past clinical records from selected patient populations. With the development of minimally invasive techniques, such as visible light spectroscopy (VLS), the ability to diagnose gastrointestinal ischemia has greatly improved. Therefore, we studied patients with PVT using VLS, radiological examination, and questionnaires. The aim of this study is to test for the presence, clinical presentation and characteristics of gastrointestinal ischemia in patients with PVT.

### Who can participate?

Patients over 18 with PVT not caused by cirrhosis of the liver or cancer

### What does the study involve?

For each participant in the study, clinical symptoms of gastrointestinal ischemia are assessed by a structured questionnaire, VLS measurements and radiological evaluation of the mesenteric arteries (arteries supplying blood to the intestines)

### What are the possible benefits and risks of participating?

Patients who are willing to participate in the study will be fully informed of the reason of the study, the extent and duration of their co-operation, the voluntary nature of their involvement and their freedom to drop out at any time without reason. They will be told that they will not

get any personal medical benefits from participating. There are no risks involved in participating this study. Patients with PVT have endoscopy on regular basis and VLS is a painless method to measure the oxygen saturation.

Where is the study run from?

Erasmus MC University Medical Center (Netherlands)

When is the study starting and how long is it expected to run for?

December 2008 to January 2015

Who is funding the study?

The Foundation for Liver and Gastrointestinal Research (SLO) (Netherlands)

Who is the main contact?

Dr Jihan Harki

## Contact information

### Type(s)

Scientific

### Contact name

Dr Jihan Harki

### ORCID ID

<https://orcid.org/0000-0001-6762-6874>

### Contact details

's Gravendijkwal 230

Rotterdam

Netherlands

3015 CE

## Additional identifiers

### Protocol serial number

NL24909.078.08

## Study information

### Scientific Title

Gastrointestinal ischemia in patients with portal vein thrombosis: a prospective study

### Acronym

GASTROINTESTINAL ISCHEMIA IN PVT

### Study objectives

The objective of this study is to assess the presence, clinical presentation and characteristics of gastrointestinal ischemia in patients with PVT.

## **Ethics approval required**

Old ethics approval format

## **Ethics approval(s)**

1. Institutional Review Board of the Erasmus MC University Medical Center Rotterdam (Netherlands), ref: MEC 2008-375.
2. Central Committee on Research Involving Human Subjects (CCMO) (Netherlands), ref: NL24909.078.08.

## **Study design**

Patients with non-cirrhotic, non-malignant PVT were studied in this single-center prospective cohort study in a tertiary care center.

## **Primary study design**

Observational

## **Study type(s)**

Diagnostic

## **Health condition(s) or problem(s) studied**

Portal vein thrombosis (PVT)

## **Interventions**

Clinical symptoms of gastrointestinal ischemia were assessed by a structured questionnaire, VLS measurements and radiological evaluation of the mesenteric arteries

## **Intervention Type**

Device

## **Primary outcome(s)**

1. Symptoms of gastrointestinal ischemia in patients with PVT
2. Mucosal saturation measurements in the gastrointestinal tract in patients with PVT

## **Key secondary outcome(s)**

Factors related to gastrointestinal ischemia in patients with PVT

## **Completion date**

01/01/2015

# **Eligibility**

## **Key inclusion criteria**

1. Patients with non-cirrhotic, non-malignant PVT. Acute and chronic PVT were defined according to Baveno V criteria as presence of PVT with or without portal cavernoma and portal hypertension.
2. Aged 18 years and over

## **Participant type(s)**

Mixed

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

**Key exclusion criteria**

1. Patients < 18years
2. No informed consent
3. Patients with liver cirrhosis
4. Patients with malignancy
5. Pregnant or lactating women

**Date of first enrolment**

18/01/2009

**Date of final enrolment**

01/01/2015

**Locations****Countries of recruitment**

Netherlands

**Study participating centre**

Erasmus MC University Medical Center

's Gravendijkwal 230

Rotterdam

Netherlands

3015 CE

**Sponsor information****Organisation**

Erasmus MC University Medical Center

**ROR**

<https://ror.org/018906e22>

# Funder(s)

## Funder type

Charity

## Funder Name

The Foundation for Liver and Gastrointestinal Research (SLO) (Netherlands)

# Results and Publications

## Individual participant data (IPD) sharing plan

## IPD sharing plan summary

Available on request