Improved blood clot resolution by a drug for eight weeks

Published: 09-02-2020
Last updated: 15-05-2024

Treatment with Venoruton prevents RVO, which is a surrogate outcome of PTS.

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Embolism and thrombosis
Study type	Interventional

Summary

ID

NL-OMON26364

Source
Nationaal Trial Register

Brief title
The RESOLVE-DVT Study

Condition

- Embolism and thrombosis

Synonym
Deep vein thrombosis

Health condition

Acute, proximal DVT of the lower extremity

Research involving
Human

Sponsors and support

Primary sponsor: Maastricht University Medical Center (MUMC+)
Source(s) of monetary or material Support: Netherlands Thrombosis Foundation

Intervention

Keyword: Hydroxyethylrutoside

Explanation

Outcome measures

Primary outcome

Presence of RVO, defined as a vein diameter ≥2mm on DUS during full compression.

Secondary outcome

Circulating biomarkers levels of inflammation, cell adhesion and remodeling; Severity of PTS-characterizing clinical signs and symptoms (Villalta-scale + leg circumferences); QoL scores (VEINS-QOL/Sym, SF-36, EQ-5D). Additional assessments are medication adherence (MMAS-8), compliance to ECT, and pill count of Venoruton (if applicable) and DOAC.

Study description

Background summary

Rationale: One in three patients experiences chronic signs and symptoms in the affected leg after deep vein thrombosis (DVT). This is referred to as the post-thrombotic syndrome (PTS). Current prevention of PTS is limited to elastic compression therapy (ECT) in the acute phase of DVT. Considering the major societal burden associated with PTS, supplementation of current prevention with an effective pharmacotherapeutic therapy could be of high value. Since the pathogenesis of PTS is mediated through inadequate thrombus resolution causing damage to vessel walls and increasing inflammation, the venoactive flavonoids with their vasoprotective and anti-inflammatory properties provide an excellent candidate. As investigational medicinal product, the highly effective flavonoid O-β-hydroxyethylrutoside (Venoruton) was chosen. Objective: To assess the effect of Venoruton on PTS-associated aspects of DVT resolution. Study design: A single-center, randomized, controlled, pilot trial. Study population: Adults presenting themselves at the emergency department (ED) with a first, acute, proximal DVT of the lower extremity. Intervention: Administration of 500 mg Venoruton twice daily for 8 weeks following DVT, in addition to standard treatment by ECT and anticoagulant therapy. Main study parameters: The primary study outcome is residual vein obstruction (RVO), assessed by duplex ultrasound (DUS) at 12 weeks after DVT. Main secondary outcomes are levels of circulating biomarkers and severity of PTS-characterizing clinical signs at baseline, 1 week, 4 weeks, 8 weeks and 12 weeks. Moreover, we measure quality of life (QoL) and PTS-characterizing symptoms at baseline, 4 weeks and 12 weeks. Nature and extent of the burden and risks associated with participation, benefit and group relatedness: Patients have a follow-up duration of 12 weeks after diagnosis of DVT. In

addition to their visit at the ED, patients will visit the outpatient clinic four times during follow-up. At each visit secondary outcomes are measured through questionnaires, blood withdrawal and assessment of the affected leg. Two visits (4 and 12 weeks) coincide with the regular clinical care pathway. The primary outcome, RVO, is measured at 12 weeks after DVT by DUS. Patients allocated to the intervention group will take two oral tablets daily over a period of eight weeks. Venoruton has been established as safe with rarely occurring, mild, reversible side-effects through many years of experience. Masking: while patients are aware of their treatment allocation, the physicians and researchers are not, as to provide unbiased outcome assessment.

Study objective

Treatment with Venoruton prevents RVO, which is a surrogate outcome of PTS.

Study design

Biomarkers and clinical signs at baseline, 1 week, 4 weeks, 8 weeks and 12 weeks; Symptoms and QoL at baseline, 4 weeks and 12 weeks; RVO at 12 weeks; Medication adherence and ECT compliance at 1 week, 4 weeks, 8 weeks and 12 weeks; Pill count Venoruton at 8 weeks; Pill count DOAC at 12 weeks.

Intervention

Treatment with Venoruton 500mg film-coated tablets oral twice daily for eight weeks after DVT

Contacts

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Eligibility criteria

Age

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

Inclusion criteria

Adult ; Objectively confirmed DVT of lower extremity by DUS; Proximal localisation of DVT; Acute onset of DVT (symptoms for ≤ 7 days at presentation); Willing and able to give written consent

Exclusion criteria

Previous DVT; Bilateral DVT; Pre-existent chronic venous insufficiency; Active malignancy or inflammatory disease; Pregnancy; Indication for therapeutic thrombolysis; Contra-indication for DOAC

Study design

Design

Study phase:	3
Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Single blinded (masking used)
Control:	Active
Primary purpose:	Prevention

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	08-12-2020
Enrollment:	44
Type:	Actual

IPD sharing statement

Plan to share IPD: No

Ethics review

Approved WMO Date:	09-02-2020
Application type:	First submission
Review commission:	METC Academisch Ziekenhuis Maastricht / Universiteit Maastricht Postbus 5800 6202 AZ Maastricht 043 387 6009 secretariaat.metc@mumc.nl

Study registrations

Followed up by the following (possibly more current) registration

ID: 52521
Bron: ToetsingOnline
Titel:

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

No registrations found.

In other registers

Register	ID
NTR-new	NL8365
CCMO	NL73142.068.20
	NCT04670432
OMON	NL-OMON52521

Study results