Treatment of Acute Venous Femoro-Iliac Thrombosis: Change the Paradigm?

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3rd June 2016
Deep Vein Thrombosis

- Third commonest cardiovascular pathology in UK
- Each year 1 in 1,000 people develop a new DVT
- Rising incidence: ageing population and increased exposure to risk factors
Chronic Venous Hypertension

Valvular dysfunction

Venous reflux  ↔  Venous obstruction
Post-Thrombotic Syndrome (PTS)

- Swollen heavy, painful leg
- Venous claudication
- Chronic skin changes
- Venous ulceration
Impact of PTS

- Reduced quality of life
  - Poorer QoL than arthritis, chronic lung disease, diabetes
  - Severe PTS = QoL comparable with angina, cancer, congestive heart failure

- Costs
  - Time away from work
  - Chronic care for PTS in UK estimated at £128 million per year
Ilio-Femoral DVT

- 80% of symptomatic DVTs
- 52% incidence of PTS within 2 years, despite optimal medical treatment
- Of these:
  - 43% moderate or severe PTS
  - 10% have leg ulcer
Current Standard of Care

Grade 1A evidence
1.2.9 Do not offer elastic graduated compression stockings to prevent post-thrombotic syndrome or VTE recurrence after a proximal DVT. This recommendation does not cover the use of elastic stockings for the management of leg symptoms after DVT. [new 2015]
Early Thrombus Removal

- Rapidly reduce the clot burden and associated inflammatory response
- Preserve venous valve function and prevent stenotic lesion
- Diagnose underlying structural cause for IF DVT (May-Thurner syndrome)
History & Development
Rationale for Use

Prevention of PTS

Venous ischaemia
Contra-Indications

- Contraindications to thrombolytic therapy
  - Recent surgery
  - Advanced malignancy
  - Trauma

- Less than 1 year life expectancy
- Poor premorbid mobility
Devices and catheters

Trellis (Covidien)

AngioJet (Boston Scientific)

EKOS (EKOS Corp.)
Complications

- Haemorrhage
  - Retro peritoneal
  - Access site
  - Intracranial

- Retro-peritoneal haematoma
- Failure to re-canalise
- Contrast reaction
CAVENT study

Key messages

- QOL did not differ between patients allocated thrombolytic therapy compared with control patients who received standard anticoagulation and compression stockings only.
- Patients who developed PTS had poorer generic and disease-specific QOL scores compared with patients without PTS.
- QOL assessment should be among the long-term outcome measures in clinical research on patients who are at risk of developing PTS.
Quality of Life

- PTS associated with a poor quality of life
- Shorter hospital stay with CDT/PMT
- No net benefit in QOL with CDT from CAVENT
In patients with acute proximal DVT of the leg, we suggest anticoagulant therapy alone over catheter-directed thrombolysis (CDT) (Grade 2C).

Remarks: Patients who are most likely to benefit from CDT (see text), who attach a high value to prevention of post thrombotic syndrome (PTS), and a lower value to the initial complexity, cost, and risk of bleeding with CDT, are likely to choose CDT over anticoagulation alone.
Ongoing Trials

Rationale and Design of the ATTRACT Study - A Multicenter Randomized Trial to
Evaluate ClinicalTrials.gov
A service of the U.S. National Institutes of Health

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DUTCH CAVA-trial: C Atheter Versus Anticoagulation Alone for Acute Primary (llio)Femoral DVT. (NL28394)

The recruitment status of this study is unknown because the information has not been verified recently.

Verified October 2012 by Maastricht University Medical Center.
Recruitment status was Recruiting

Sponsor:
Maastricht University Medical Center

Information provided by (Responsible Party):
Maastricht University Medical Center

ClinicalTrials.gov Identifier:
NCT00970619
First received: September 1, 2009
Last updated: October 11, 2012
Last verified: October 2012
History of Changes
Thank You!