Desmopressin and FVIII concentrate combination treatment in non-severe hemophilia A patients undergoing minor interventions

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON26618

Source
NTR

Brief title
Little DAVID

Health condition

Hemophilia A;
Surgery;
Pharmacokinetics;
Desmopressin

Sponsors and support

Primary sponsor: Erasmus University Medical Center Rotterdam
Source(s) of monetary or material Support: Erasmus University Medical Center Rotterdam; Innovatiefonds zorgverzekeraars

Intervention

Outcome measures

Primary outcome

Efficacy of treatment, measured as the deviation of the measured FVIII from the predicted FVIII range preoperatively.

The amount of FVIII concentrate in IU per kilogram

Secondary outcome

a) Number and nature of bleeding during the first 14 days after the minor intervention (appendix VI)

a) Other adverse events during the first 14 days after the minor intervention

b) Treatment costs in both treatment arms

c) The proportion of patients with FVIII plasma levels within set target levels after the minor intervention

d) Experienced quality of care in participating patients

e) Discrepancies between one-stage and chromogenic FVIII-measurements before and after desmopressin administration

f) Inhibitor development 4-6 weeks after the minor intervention

Study description

Background summary

Rationale: Hemophilia A (HA) is a rare bleeding disorder, caused by factor VIII deficiency. In non-severe HA patients (FVIII 0.01-0.40 IU/mL), minor interventions, such as dental surgery and endoscopies, are an important treatment indication. Two treatment options are currently available: FVIII concentrate and desmopressin. Unfortunately, perioperative treatment is not optimal, as high bleeding rates after dental surgery, the most frequent occurring type of minor interventions, of 12% and 25% were found in two recent studies. Moreover, a previous evaluation of FVIII concentrate treatment from our centre shows a high rate of dosing above FVIII target levels (79%) and a rate of dosing below FVIII target levels of 8%. Both may lead to complications. Moreover, FVIII concentrate is expensive. Pharmacokinetic (PK) guided dosing, a patient tailored dosing method, can improve dosing accuracy.

Desmopressin, the second treatment option, releases endogenous FVIII and von Willebrand

factor, improving hemostasis. Desmopressin is not ideal due to several barriers. Amongst others, most patients do not reach sufficient FVIII levels to undergo minor interventions. An increase in the use of desmopressin instead of FVIII concentrate would be highly beneficial, as desmopressin is cheaper and more widely available. Desmopressin and FVIII concentrate combination treatment may be an innovative treatment option.

Objective: To show the efficacy of combination treatment with desmopressin and FVIII concentrate is equal to the efficacy of FVIII concentrate monotherapy, but will reduce the FVIII concentrate consumption in non-severe hemophilia A patients around minor interventions.

Study design: Randomized controlled trial

Study population: Seventy non-severe hemophilia A patients (FVIII ¡Ý0.01 IU/mL), between 12-70 years of age, undergoing a minor intervention and requiring perioperative FVIII replacement therapy for a maximum of 48 hours.

Intervention (if applicable): The first group receives standard treatment consisting of FVIII concentrate monotherapy. The intervention group receives desmopressin and FVIII concentrate combination treatment.

Main study parameters/endpoints: The average deviation of the measured FVIII peak level to the predicted peak FVIII range before the minor intervention in IU per mL and the FVIII concentrate consumption in IU per kilogram.

Study objective

Desmopressin and FVIII concentrate combination treatment will be equally effective as FVIII concentrate monotherapy, but will decrease the needed amount of FVIII concentrate significantly

Study design

preoperatively

14 days postoperatively

4-6 weeks postpoperatively

Intervention

Desmopressin and FVIII concentrate combination treatment.

Contacts

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Eligibility criteria

Inclusion criteria

- Non-severe hemophilia A patients (FVIII 0.01-0.40 IU/mL)
- In need of a minor surgical intervention
- Age minimally 12 and maximally 70 years at study inclusion date
- Need for perioperative FVIII concentrates for a maximum of 48 hours
- Having admissible results of a desmopressin test (see paragraph 3.1)
- Absolute increase in FVIII 1 hour after desmopressin administration ≥ 0.2 IU/mL after a previous (test) dose
- Male gender
- (Parental) informed consent

Exclusion criteria

- Patients with other congenital or acquired hemostatic abnormalities
- Clinically relevant FVIII inhibiting antibodies (>0.5 BU) preoperatively, unless successfully treated with immunotolerance therapy
- Needed treatment duration with FVIII concentrates longer than 48 hours
- Contraindications for desmopressin, e.g. cardiovascular disease (see appendix IV)

- Use of co-medication that has an interaction with desmopressin (see appendix IV)
- Intolerance to previous desmopressin administrations

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	Active

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	01-11-2016
Enrollment:	50
Type:	Anticipated

IPD sharing statement

Plan to share IPD: Undecided

Ethics review

Positive opinion

Date:	16-09-2016
Application type:	First submission

Study registrations

Followed up by the following (possibly more current) registration

ID: 47789

Bron: ToetsingOnline
Titel:

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

No registrations found.

In other registers

Register	ID
NTR-new	NL5855
NTR-old	NTR6036
CCMO	NL57682.078.16
OMON	NL-OMON47789

Study results