Evaluation of the necessary frequency of blood glucose self-monitoring in type 2 diabetic patients. A prospective, controlled, randomised, multicenter study.

Submission date	Recruitment status	Prospectively registered
05/09/2005	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
28/10/2005	Completed	[X] Results
Last Edited 09/09/2008	Condition category Nutritional, Metabolic, Endocrine	Individual participant data

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Contact details

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Additional identifiers

Protocol serial number

N/A

Study information

Scientific Title

Study objectives

To evaluate the impact of the frequency of blood glucose self-monitoring on glycaemic control (HbA1c and occurrence of hypoglycaemia) of type 2 diabetic patients. Currently there are no general recommendations on the frequency of self blood glucose monitoring in type 2 diabetics treated with a fixed insulin regime or oral antidiabetic medication. The study intends to compare over a follow-up period of 6 month patients with a high frequency of self-monitoring with those with a low frequency. This comparison is done separately for two groups of patients:

- 1. Treated with a fixed insulin regime
- 2. Treated with oral antidiabetic drugs only

Satisfaction with the recommended treatment is a secondary endpoint of the study.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Not provided at time of registration

Study design

Randomised controlled trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Type 2 diabetes mellitus

Interventions

Blood glucose monitoring

- 1. Patients on insulin mixture:
- 1.1 Maximum recommendation: every day fasting, every second day before dinner, additional once a profile
- 1.2 Minimum recommendation: once a week a fasting blood glucose
- 2. Patients who get an oral antidiabetic:
- 2.1 Maximum recommendation: every second day a fasting blood glucose, once a week a blood sugar check before dinner
- 2.2 Minimum recommendation: one fasting blood glucose per week

Intervention Type

Other

Phase

Not Specified

Primary outcome(s)

HbA1c six months after start of the study

Key secondary outcome(s))

- 1. Hypoglycaemia with necessary outside help
- 2. Hyperosmolar coma
- 3. Quality of life
- 4. Compliance
- 5. HbA1c after 12 months

Completion date

01/10/2006

Eligibility

Key inclusion criteria

- 1. Patients treated with a fixed dose of mixture insulin twice a day
- 2. Patients who are treated with one or more oral antidiabetic drugs
- 3. From 35 to 80 years
- 4. Informed consent
- 5. Type 2 diabetic patients

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

Αll

Key exclusion criteria

- 1. Treatment with multiple insulin injections (more than 2/day)
- 2. Type 1 diabetic patients
- 3. Advanced renal insufficiency (known creatinine >2.5 mg/dl)
- 4. > 2 hypoglycaemia with necessary outside help within the last three months
- 5. Hypoglycaemic shock/hyperosmolaric coma within the last three months
- 6. Pregnancy
- 7. Severe impaired vision
- 8. Communication problems
- 9. Home care/nursing service

Date of first enrolment

01/12/2003

Date of final enrolment

01/10/2006

Locations

Countries of recruitment

Germany

Study participating centre Deutsches Diabetes Zentrum an der Heinrich-Heine-Universität

Duesseldorf Germany 40225

Sponsor information

Organisation

Federal Ministry of Education and Research (Bundesministerium Für Bildung und Forschung [BMBF]) (Germany)

ROR

https://ror.org/04pz7b180

Funder(s)

Funder type

Government

Funder Name

Federal Ministry of Education and Research (Bundesministerium Für Bildung und Forschung [BMBF]) - Germany - 01GL0303

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type Details Date created Date added Peer reviewed? Patient-facing?

Results:

Results article 28/08/2008 Yes No