

Eliminating periodontal infection in patients with type 2 diabetes

Submission date 21/05/2010	Recruitment status No longer recruiting	☐ Prospectively registered ☐ Protocol
Registration date 21/05/2010	Overall study status Completed	☐ Statistical analysis plan ☐ Results
Last Edited 13/12/2019	Condition category Oral Health	☐ Individual participant data ☐ Record updated in last year

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

Contact name
Miss Kerry Stone

Contact details
School of Dental Sciences
Framlington Place
Newcastle upon Tyne
United Kingdom
NE2 4BW
-
kerry.stone@ncl.ac.uk

Additional identifiers

Protocol serial number
4678

Study information

Scientific Title
Eliminating periodontal infection in patients with type 2 diabetes: a single centre non-randomised observational diagnosis and treatment study

Acronym

DRN149 (DDP)

Study objectives

Periodontal disease is emerging as a recognised complication of diabetes, and epidemiological data support that patients with type 2 diabetes mellitus (T2DM) have increased prevalence and severity of periodontitis. Furthermore, recent preliminary data suggest that diabetes control in patients with periodontitis may be improved following successful periodontal treatment.

In this study, we will perform a full periodontal examination and glycaemic control will be measured (HbA1c) in 160 T2DM individuals aged 30 - 55 years. For those patients who are diagnosed as having periodontal disease (estimated n = 40), we will treat their disease using established periodontal treatment methods to eliminate the periodontal infection. The patients will be monitored for 12 months following treatment and changes in HbA1c at months 3, 6 and 12 following treatment will be measured. We will also measure cytokine and adipokine levels in the gingival crevicular fluid (GCF), saliva and in serum, including interleukin-6 (IL-6) and tumour necrotising factor-alpha (TNF-alpha) in all patients at screening, and before and after treatment in those patients with periodontal disease to understand better the pathogenic processes common to both diseases. 40 controls (non-diabetic patients who have periodontal disease) will also be recruited.

This research will provide fundamental information on associations between periodontal inflammation and glycaemic control and will evaluate the effect of periodontal therapy on glycaemic control in T2DM patients with periodontal disease.

Ethics approval required

Old ethics approval format

Ethics approval(s)

MREC approved on the 28th February 2006 (ref: 06/Q0904/8)

Primary study design

Observational

Study design

Single centre non-randomised observational diagnosis and treatment study

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Topic: Diabetes Research Network, Oral and Gastrointestinal, Primary Care Research Network for England; Subtopic: Type 2, Oral and Gastrointestinal (all Subtopics); Disease: Other, Oral & Dental

Interventions

Conventional periodontal therapy in patients with periodontal disease.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

1. Serum HbA1c, lipid profile, high sensitivity C-reactive protein (hsCRP)
2. Inflammatory cytokines (IL-1b, TNF-a, IL-6, INF-y)

Key secondary outcome(s)

Not provided at time of registration

Completion date

30/03/2010

Eligibility**Key inclusion criteria**

Not provided at time of registration

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex**Key exclusion criteria**

Not provided at time of registration

Date of first enrolment

01/05/2006

Date of final enrolment

30/03/2010

Locations**Countries of recruitment**

United Kingdom

England

Study participating centre

School of Dental Sciences

Newcastle upon Tyne

United Kingdom
NE2 4BW

Sponsor information

Organisation

Newcastle upon Tyne Hospitals NHS Foundation Trust (UK)

ROR

<https://ror.org/05p40t847>

Funder(s)

Funder type

Charity

Funder Name

Dunhill Medical Trust (UK)

Alternative Name(s)

The Dunhill Medical Trust, Dunhill Medical Trust, DunhillMedical, DMT

Funding Body Type

Private sector organisation

Funding Body Subtype

Trusts, charities, foundations (both public and private)

Location

United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary