ISRCTN77400898 https://doi.org/10.1186/ISRCTN77400898

Periodontal impact of anorexia nervosa and bulimia nervosa

Submission date
06/11/2016

Recruitment status
No longer recruiting

Registration date
16/11/2016

Overall study status
Completed

Last Edited
07/10/2022

Condition category
Mental and Behavioural Disorders

[ ] Prospectively registered
[ ] Protocol
[ ] Statistical analysis plan
[X] Results
[ ] Individual participant data

Plain English summary of protocol

Background and study aims:
Eating disorders are serious mental health conditions where the sufferer has an unhealthy relationship with food. The most common forms of eating disorders are anorexia nervosa, where the sufferer tries to keep their body weight as low as possible usually by severely restricts the amount they eat and exercising excessively, and bulimia nervosa, where the sufferer tries to control their weight by severely restricting the amount of food they eat, then binge eating and purging the food from their body by making themselves vomit or using laxatives. Nowadays, unknowns exist regarding the role of malnutrition (lack of proper nutrition) in the causes and management of periodontitis (gum disease). Therefore, there is an urgent need of studies exploring the relationship between eating disorders and periodontal conditions. The aim of this study is to determine the link between gum disease and eating disorders.

Who can participate?
Adult women with anorexia nervosa or bulimia nervosa and healthy women of the same age.

What does the study involve?
Participants in all groups attend a single study visit. At the visit, participants are interviewed about their oral hygeine behaviours, whether they smoke and how long they have had an eating disorder for (if from the anorexic or bulemic group). They then receive a full mouth examination to check for missing teeth and to assess gum health. At the end of the study, the results from the three patient groups are compared.

What are the possible benefits and risks of participating?
Participants benefit from receiving a specialized full-mouth examination, a gum disease assessment and dental advice. There are no notable risks involved with participating in this study.

Where is the study run from?
1. Paul Brousse Hospital (France)
2. Rothschild Hospital (France)

When is study starting and how long is it expected to run for?
January 2014 to January 2018

Who is funding the study?
Assistance Publique Hôpitaux de Paris (France)

Who is the main contact?
1. Dr Hélène Rangé (public)
helene.range@aphp.fr
2. Professor Philippe Bouchard (scientific)
philippe.bouchard@aphp.fr

Contact information

Type(s)
Public

Contact name
Dr Hélène Rangé

Contact details
Department of Periodontology
Service of Odontology, Rothschild Hospital, AP-HP
5 rue Santerre
Paris
France
75012
+33 6 1465 6947
helene.range@aphp.fr

Type(s)
Scientific

Contact name
Prof Philippe Bouchard

Contact details
Department of Periodontology
Service of Odontology, Rothschild Hospital, AP-HP
5 rue Santerre
Paris
France
75012
+33 6 1465 6947
philippe.bouchard@aphp.fr

Additional identifiers

Protocol serial number
CPP n°13588

Study information

Scientific Title
Periodontal Impact of Eating Disorders: the PERIOED case-control study

Acronym
PERIOED

Study objectives
Eating disorder patients have a higher risk for periodontal inflammation than non-eating disorder subjects.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Ethical Research Comittee CPP Ile de France I, 08/09/2014, ref: IRB 00008522

Study design
Observational cross-sectional case-control single-centre study

Primary study design
Observational

Study type(s)
Diagnostic

Health condition(s) or problem(s) studied
1. Anorexia nervosa
2. Bulimia nervosa

Interventions
All participants attend one single visit at baseline.

Firstly, this visit involves a patient interview in order to record the oral hygiene behaviors (dental visits frequency and toothbrushing habits), addictions (tobacco smoking status) and characteristics associated with eating disorders (duration in months, restricted eating profile and self-induced vomiting profile). Secondly, participants receive a full-mouth periodontal examination, at 6 sites per tooth (except third molars), using a manual periodontal probe (HuFriedy PCP UNC 15 probe, Chicago, IL, USA). The number of missing teeth is reported. Dental plaque index and bleeding on probing score are recorded using a dichotomic approach. Periodontal probing depths and gingival recession are measured in millimeters using the periodontal probe.

Intervention Type
Other

Primary outcome(s)
Clinical Attachment Level (CAL) is calculated as follows: periodontal probing depth (in mm) added to gingival recession height (in mm), which are measured with a manual periodontal probe (6 sites per tooth) at the day of the oral examination.

Key secondary outcome(s))

Gingival inflammation is measured using the bleeding on probing score (% of sites) at the day of the oral examination.

Completion date
01/01/2018

Eligibility

Key inclusion criteria
Anorexia nervosa participants:
1. Age 18 to 65 years old
2. Female
3. A proper diagnosis of anorexia nervosa for at least 5 years
4. Affiliated to the French social insurance

Bulimia nervosa participants:
1. Age 18 to 65 years old
2. Female
3. A proper diagnosis of bulimia nervosa for at least 5 years
4. Affiliated to the French social insurance

Non-eating disorder participants:
1. Age 18 to 65 years old
2. Female
3. Non-eating disorder volunteer
4. Affiliated to the French social insurance

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 years

Sex
Female

Total final enrolment
140

Key exclusion criteria
1. Unable to speak French
2. Unable to read and/or understand the information form
3. Taking anti-inflammatory medications or antibiotics at dental examination
4. Previously received any dental treatment that could interfere with the periodontal status 3

months before the clinical examination (scaling and root planning, orthodontic treatment ongoing)
5. Having less than 10 teeth

Date of first enrolment
07/10/2014

Date of final enrolment
07/11/2016

Locations

Countries of recruitment
France

Study participating centre
Psychiatric and Addiction Department, Paul Brousse Hospital, AP-HP
12 avenue Paul Vaillant Couturier
Villejuif
France
94800

Study participating centre
Department of Periodontology, Service of Odontology, Rothschild Hospital, AP-HP
5 rue Santerre
Paris
France
75012

Sponsor information

Organisation
Assistance Publique Hôpitaux de Paris (APHP)

ROR
https://ror.org/00pg5jh14

Funder(s)

Funder type
Hospital/treatment centre

Funder Name
Assistance Publique - Hôpitaux de Paris

Alternative Name(s)
Assistance Publique Hôpitaux de Paris, Assistance Publique–Hôpitaux de Paris, AP-HP

Funding Body Type
Private sector organisation

Funding Body Subtype
Trusts, charities, foundations (both public and private)

Location
France

Results and Publications

Individual participant data (IPD) sharing plan
Requests for data should be sent to the corresponding authors Hélène Rangé (helene.jan@aphp.fr) or Philippe Bouchard (philippe.bouchard@aphp.fr)

IPD sharing plan summary
Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		16/12/2019	06/10/2022	Yes	No
Results article		12/03/2019	06/10/2022	Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes