

Coronectomy of the lower wisdom tooth in older adults

Submission date 12/06/2024	Recruitment status No longer recruiting	☐ Prospectively registered ☐ Protocol
Registration date 14/06/2024	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 22/07/2025	Condition category Oral Health	☐ Individual participant data

Plain English summary of protocol

Background and study aims

Coronectomy is an alternative to complete surgical removal of a mandibular third molar (wisdom tooth) that is near the inferior alveolar nerve. It involves removing the crown of the tooth while leaving the roots intact. This study investigates the effect of coronectomy on postoperative quality of life in older adults.

Who can participate?

Patients aged over 60 years who require coronectomy of a mandibular third molar

What does the study involve?

Patients undergo coronectomy on a mandibular third molar. During the first week after surgery, patients fill in a questionnaire and they are followed up at 1 week, 3 months, 6 months, and 1 year (patients are followed up annually up to 5 years later).

What are the possible benefits and risks of participating?

There are no risks of participating. The surgery has to be performed. The benefits are that we gain insight into the impact on the Oral Health-Related Quality of Life after a coronectomy of a mandibular third molar in the older patient population.

Where is the study run from?

Amstelland Hospital (The Netherlands)

When is the study starting, and how long is it expected to run?

July 2018 to December 2021

Who is funding the study?

Amstelland Hospital (The Netherlands)

Who is the main contact?

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Contact information

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Additional identifiers**Protocol serial number**

W19_015# 19.033

Study information

Scientific Title

Mandibular third molar coronectomy in older adults and effects on oral health-related quality of life

Study objectives

This study aimed to assess the effect of coronectomy on the postoperative quality of life during the first postoperative week in older adults using the Oral Heal Impact Profile-14 (OHIP-14) questionnaire. Factors potentially influencing the postoperative OHIP-14 score, such as smoking, impaction pattern of the mandibular third molar, inclination of the mandibular third molar, and state of eruption, were also evaluated. Patients were monitored up to a minimum of 1 year after the surgery.

Ethics approval required

Ethics approval required

Ethics approval(s)

Approved 23/01/2019, Academic Medical Center Medical Ethical Committee (Meibergdreef 9, Amsterdam, 1105AZ, Netherlands; +31 (0)205667389; metc@amsterdamumc.nl), ref: W19_015#19.033

Primary study design

Observational

Study design

Observational cohort study

Study type(s)

Quality of life

Health condition(s) or problem(s) studied

Impacted mandibular third molar

Interventions

Patients undergo coronectomy on a mandibular third molar. During the first week after surgery, patients fill in an Oral Health Impact Profile-14 (OHIP-14) questionnaire. This study's follow-up was at 1 week, 3 months, 6 months, and 1 year (patients are followed up annually up to 5 years postoperative).

Intervention Type

Procedure/Surgery

Primary outcome(s)

Oral health related quality of life measured with the OHIP-14 questionnaire each day of the first postoperative week

Key secondary outcome(s)

1. Postoperative pain measured using the visual analog score (VAS) during the 1st postoperative week

2. Swelling (self-reported yes/no) during the 1st postoperative week
3. Trismus (self-reported yes/no) during the 1st postoperative week
4. Postoperative bleeding (self-reported yes/no), during the 1st postoperative week
5. Infection (yes or no infection) assessed by the clinician at 1 week
6. Potential neurosensory deficits assessed by the clinician using tactile, two-point discrimination, thermal change detection and heat pain thresholds at 1 week, 3 months, 6 months, and 1 year
7. Postoperative self-care behaviors: use of analgesics and cooling the cheek with ice on the first postoperative day

Completion date

31/12/2021

Eligibility

Key inclusion criteria

1. An indication for coronectomy on a mandibular third molar
2. A minimum age of 60 years at the time of the surgery
3. Fluency in Dutch to complete the Dutch version of the OHIP-14 questionnaire

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

60 Years

Upper age limit

100 Years

Sex

All

Total final enrolment

30

Key exclusion criteria

1. <60 years old
2. Did not have an indication for coronectomy of a mandibular third molar

Date of first enrolment

01/02/2019

Date of final enrolment

31/12/2020

Locations

Countries of recruitment

Netherlands

Study participating centre

Ziekenhuis Amstelland

Laan van de Helende Meesters 8

Amstelveen

Netherlands

1181AM

Sponsor information

Organisation

Ziekenhuis Amstelland

ROR

<https://ror.org/05e73v668>

Funder(s)

Funder type

Hospital/treatment centre

Funder Name

Amstelland Hospital

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated and/or analysed during the current study will be published as a supplement to the results publication

IPD sharing plan summary

Published as a supplement to the results publication

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
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[Results article](#)

27/10/2024

22/07/2025

Yes

No