# Orofacial abnormalities of patients with mucopolysaccharidoses or mucolipidosis II or III in the Netherlands, a singlecenter study

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To investigate the prevalence and existence of orofacial abnormalities, in patients with Mucopolysaccharidoses and Mucolipidosis type II and III and how these abnormalities impair the quality of life.

Ethical review Approved WMO

**Status** Pending

**Health condition type** Metabolic and nutritional disorders congenital

**Study type** Observational non invasive

# **Summary**

#### ID

NL-OMON49498

## **Source**

ToetsingOnline

#### **Brief title**

Orofacial abnormalities of patients with MPS or ML II/III

## **Condition**

- Metabolic and nutritional disorders congenital
- · Lipid metabolism disorders

## **Synonym**

Hurler-Scheie Syndrome, metabolic disorder

## Research involving

Human

# **Sponsors and support**

**Primary sponsor:** Erasmus MC, Universitair Medisch Centrum Rotterdam **Source(s) of monetary or material Support:** Ministerie van OC&W

## Intervention

Keyword: mucolipidosis, mucopolysaccharidosis, Orofacial

## **Outcome measures**

## **Primary outcome**

- The incidence of orofacial abnormalities, determined with light photos,

CBCT-scans, 3D stereophotographs, Temporomandibular Joint Examination

(Diagnostic Criteria for Temporomandibular Disorders, DC-TMD) and a general dental/oral examination.

- Outcomes of questionnaires filled out by the patient/caregiver (OHIP-14 / COHIP (Child Oral Health Impact Profile) and Darriford appearance scale (for non-neuronopathic adult patients)).

#### **Secondary outcome**

n.a.

# **Study description**

## **Background summary**

Orofacial abnormalities in MPS and ML patients have not yet been investigated in a standardized manner in a large cohort of patients. The frequency and severity of these abnormalities are unclear. Both are important for developing protocols for early detection of orofacial problems and prevention of complications, to improve quality of life.

# **Study objective**

To investigate the prevalence and existence of orofacial abnormalities, in

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patients with Mucopolysaccharidoses and Mucolipidosis type II and III and how these abnormalities impair the quality of life.

## Study design

The study design is a cross-sectional cohort study with all MPS and ML II and III patients (both children and adults) in the Erasmus MC. The patients will be asked to come visit the department of oral and maxillofacial surgery of the Erasmus MC once to investigate orofacial abnormalities by making light photos, a Cone-Beam CT (CBCT) (three-dimensional imaging of the jaws and maxillofacial structures) and 3D stereophotographs, by performing a Temporomandibular Joint examination (Diagnostic Criteria for Temporomandibular Disorders, DC-TMD), a general dental/oral examination and filling out questionnaires regarding their subjective wellbeing, considering their oral health (using the (Child) Oral Health Impact Profile (OHIP-14 / COHIP) questionnaire) and (for non-neuronopathic adult patients, using the Darriford appearance scale) their appearance.

## Study burden and risks

The risk of side-effects is very limited. The patients will visit the department of oral and maxillofacial surgery of the Erasmus MC one day(part). This visit can be combined with the standardised annual follow-up of these patients. The patients receive an extensive examination of orofacial features, which is important for early detection of orofacial problems and preventing complications.

# **Contacts**

#### **Public**

Erasmus MC, Universitair Medisch Centrum Rotterdam

Doctor Molewaterplein 40 Rotterdam 3015 GD NL

## **Scientific**

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# **Trial sites**

## **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

## Age

Adolescents (12-15 years) Adolescents (16-17 years) Adults (18-64 years) Children (2-11 years) Elderly (65 years and older)

# **Inclusion criteria**

Patients diagnosed with MPS or ML II or ML III (enzyme and/or DNA diagnostics) and known in the Erasmus MC.

# **Exclusion criteria**

- Patients who don't want to participate in the study;
- Patients with an end-stage disease or other medical conditions making the examinations impossible.

# Study design

# **Design**

Study type: Observational non invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Diagnostic

## Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 01-01-2021

Enrollment: 60

Type: Anticipated

# **Ethics review**

Approved WMO

Date: 30-03-2021

Application type: First submission

Review commission: METC Erasmus MC, Universitair Medisch Centrum Rotterdam

(Rotterdam)

# **Study registrations**

# Followed up by the following (possibly more current) registration

No registrations found.

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

No registrations found.

# In other registers

Register ID

CCMO NL74342.078.20