

Knowledge and perception of Austrian dental students on molar incisor hypomineralization (MIH)

Dear Student,

We would like to invite you to participate in the above mentioned survey.

Molar incisor hypomineralization (MIH) is a qualitative defect of the enamel that mainly affects the first permanent molars, with or without involvement of the incisors. The aim of this project is to assess the knowledge, awareness and perceptions regarding the distribution, severity, etiology and treatment modalities of MIH among dental students in Austria.

Your decision to participate in this study is completely voluntary and will not affect your participation in courses or assessments. The response sheets have no identifying content. If at any time you wish to withdraw your participation, you may do so without any consequences. However, as the survey is anonymous, we cannot exclude your data once you have handed the survey. If you agree to participate, please complete the questionnaire using the attached clinical pictures, this should take no longer than 10 minutes. Please note that this is not an examination, but only a general survey of student knowledge of MIH.

The information we collect allows us to determine the level of knowledge on MIH. The data will only be accessible to the named researchers. A summary of the results of this study will be used to help inform the curriculum for dental students and will be made available and presented at scientific conferences or in publications.

If you need further information, please contact Univ.-Prof. Dr. Katrin Bekes, MME (katrin.bekes@meduniwien.ac.at).

Thank you for your participation.

Clinical pictures of MIH:

Due to copyright reasons the pictures cannot be shown in this appendix.

Based on your answers to the following questions, we will not be able to identify you. Please answer honestly so that we can realistically assess the knowledge about MIH.

Participant Profile:

Gender:

- ☐ Female
- ☐ Male

Age:

In which dental semester are you currently enrolled?

- ☐ 11. Semester
- ☐ 12. Semester

Which university do you study at?

Awareness, knowledge and perception of MIH

1. Are you familiar with MIH?

- ☐ Yes
- ☐ No

If yes, how did you find out about it? *(Multiple answers possible)*

- ☐ Dental journals (printed or electronic)
- ☐ Lectures
- ☐ Lecture notes
- ☐ Brochures
- ☐ Internet
- ☐ Books (printed or electronic)
- ☐ Dental clinic/clinical courses
- ☐ Other students
- ☐ Other (please specify): _____

2. Do you know the clinical characteristics of MIH?

- ☐ Yes
- ☐ No

3. Do you have difficulties distinguishing MIH defects from other enamel defects?

- ☐ Yes
- ☐ No

If yes, which? *(Multiple answers possible)*

- ☐ Dental fluorosis
- ☐ Enamel hypoplasia
- ☐ Amelogenesis imperfecta
- ☐ Dentinogenesis imperfecta

4. Which factors do you think are involved in the etiology of MIH? *(Multiple answers possible)*

- ☐ Genetic factors
- ☐ Chronic disease(s) of the mother during pregnancy

- ☐ Chronic disease(s) of the affected child
- ☐ Antibiotics / medications taken by the mother during pregnancy
- ☐ Antibiotic(s)/medication(s) taken by the affected child itself
- ☐ Environmental contaminants
- ☐ Acute medical conditions that the affected child experienced during the mother's pregnancy
- ☐ Acute medical condition(s) of the affected child
- ☐ Fluoride exposure
- ☐ None
- ☐ Other (please specify): _____

5. Are you aware of the prevalence of MIH in Austria?

- ☐ Yes
- ☐ No

6. Do you think it would be worthwhile investigating the prevalence in Austria?

- ☐ Yes
- ☐ No

Questions about MIH with clinical context

7. Are you able to diagnose a patient with MIH?

- ☐ Yes
- ☐ No (*continue with question 18*)
- ☐ Not sure (*continue with question 18*)

8. How often do you notice these teeth in clinic?

(Choose **one** option)

- ☐ Weekly
- ☐ Monthly
- ☐ Annually

9. In what proportion of patients do you observe MIH teeth?

- ☐ < 10 %
- ☐ 10 - 25 %
- ☐ > 25 %

10. Which of the following features do you most frequently notice regarding severity of the defect?

(Choose **one** option)

- ☐ White defects
- ☐ Yellow-brown defects
- ☐ Post eruptive enamel breakdown
- ☐ Other (please specify): _____

11. How confident do you feel when diagnosing MIH?

(Choose **one** option)

- ☐ Very confident
- ☐ Confident
- ☐ Slightly confident
- ☐ Not confident at all

12. Do you know if there are clinical criteria for diagnosing MIH?

*(Choose **one** option)*

- ☐ Yes and I know how to apply them clinically
- ☐ Yes, but I do not know how to apply them
- ☐ No

13. In clinic, have you encountered demarcated hypomineralised defects in permanent teeth other than the first permanent molars and incisors?

- ☐ Yes
- ☐ No

If yes, please name the tooth / teeth: _____

14. How frequently do you notice demarcated hypomineralized lesions in the second deciduous molars compared to the first permanent molars?

*(Choose **one** option)*

- ☐ More often
- ☐ Rarely
- ☐ Just as common as with the first permanent molar.
- ☐ Never seen

15. Which material do you use MOST in treating MIH molars?

(Multiple answers possible)

- | | |
|--|--|
| <input type="checkbox"/> Amalgam | <input type="checkbox"/> Compomer |
| <input type="checkbox"/> Composite | <input type="checkbox"/> Glass ionomer cement |
| <input type="checkbox"/> Flowable composite | <input type="checkbox"/> Preformed steel crowns |
| <input type="checkbox"/> Resin-modified-
Glass ionomer cement | <input type="checkbox"/> Other: (please specify) |
| | _____ |

16. Which factors influence your choice of restorative material?

(Multiple answers possible)

- ☐ Adhesion
- ☐ Aesthetics
- ☐ Patient / parent preference
- ☐ Durability

- ☐ Remineralization potential
- ☐ Hypersensitivity
- ☐ Personal experience
- ☐ Research results

17. Do you think MIH is a clinically relevant problem?

- ☐ Yes
- ☐ No

If so, what is giving you difficulties? *(Multiple answers possible)*

- ☐ Diagnosis
- ☐ Aesthetics
- ☐ Achieving adequate local anesthesia
- ☐ Determination of the restoration margins of the affected enamel
- ☐ Provision of adequate restorations
- ☐ Long-term success of restorations
- ☐ Achieving a result that feels good to the patient and allows normal function as well as good oral hygiene

18. Would you suggest including clinical training regarding MIH in your dental course?

- ☐ Yes
- ☐ No

If yes, in which area(s) do you think you need to know/be taught about the most?
(Multiple answers possible)

- ☐ Diagnosis
- ☐ Etiology
- ☐ Treatment
- ☐ Other (please specify): _____

Thank you for completing the questionnaire.