

Cavities May Interfere With Detection of Developmental Defects

In teeth with cavities, it's easy to overlook developmental defects that may also be present, our March Quick Poll shows.

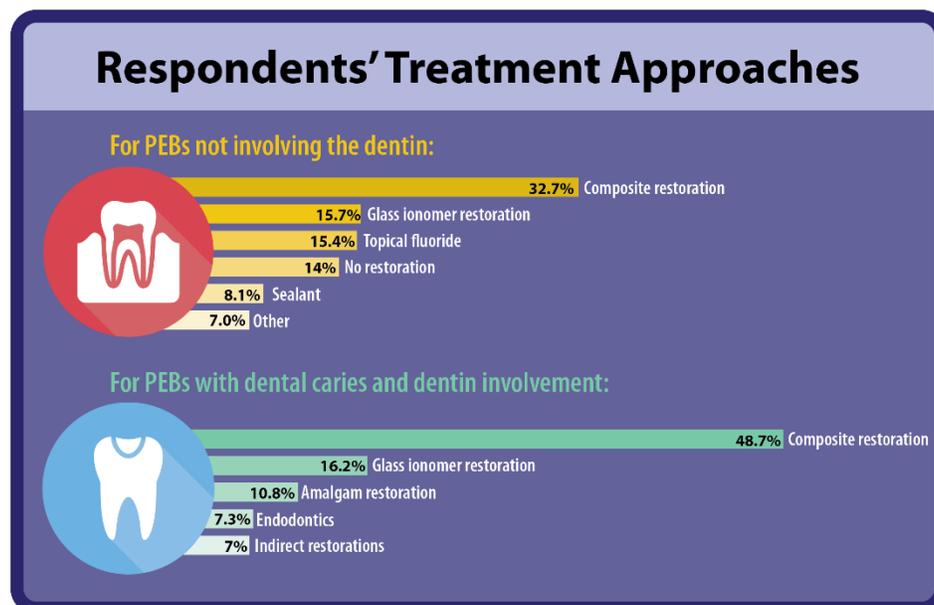
The respondents were shown a photograph of an incisor/molar with hypomineralization and cavities; they were asked to check which of five possible conditions the tooth suffered from. Almost all (92.6%) of the 367 respondents diagnosed the cavities. Fewer—70.6%—also diagnosed the molar/incisor hypomineralization (MIH), a condition that develops in childhood.

In addition:

- 11.5% selected amelogenesis imperfecta (also a developmental disorder)
- 4.1% selected severe erosion
- 12% selected fluorosis.

With MIH, the surface enamel initially develops to a normal thickness but then chips off, a process called post eruption breakdown. Defects in the enamel (opacities) can appear white, cream, yellow, or brown. However, there's always a sharp demarcation between the affected and sound enamel. MIH may also appear as atypical restorations.

Hypomineralized molars are likely to be very sensitive, making them a challenge to treat, studies show. Our poll backed that up: Almost 66% of respondents said their patients with similar lesions as shown in the images had dental sensitivity.



When asked if they would include areas of the tooth with opacities that were not included in the cavity in a composite restoration, respondents were mixed:

- Yes: 21.7%
- No: 31.3%
- Maybe: 46.5%.

However, when it comes to deciding on a treatment approach, many respondents said it was difficult to make decisions based on photographs, without being able to feel the softness of the dentin.

To continue the conversation, please visit the Quick Polls Results thread in the [Member Forum](#).

William V, Messer LB, Burrow MF. [Molar incisor hypomineralization: review and recommendations for clinical management](#). *Pediatric Dentistry*. 2006;28(3):224-232.

Weerheijm KL, Duggal M, Mejàre I, Papagiannoulis L, Koch G, Martens LC, Hallonsten AL. [Judgement criteria for molar incisor hypomineralisation \(MIH\) in epidemiologic studies: a summary of the European meeting on MIH held in Athens, 2003](#). *European Journal of Paediatric Dentistry*. 2003;4(3):110-113.