

Mirror-image of supernumerary tooth on monozygotic twins

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Objective: This poster aims to describe the presence of dental anomalies of number with mirror-image on monozygotic twins followed at the university clinic of FMDUL.



Description:

Patient A

- Male
- 5 years-old at 1st appointment 17/04/2018
- Non relevant medical records
- Intraoral examination:
- Supernumerary conoid tooth erupted between 52 and 51
- vestibular caries on tooth 51







- Male
- 4 years-old at 1st appointment 07/04/2017
- Non relevant medical records
- Intraoral examination:
- supernumerary conoid tooth erupted between 62 and 61 (fused with 61)

Patient B

- fusion fissure caries on tooth 61 and supernumerary
- extensive coronary fracture (trauma), apical lesion on tooth 51









Discussion: This clinical case demonstrates that monozygotic twins may share similar dental anomalies (1,2). In this case, the coincidence of anomalies of number was observed, such as the presence of a supernumerary tooth in the pre-maxillary region, with a similar morphology and a symmetric distribution, suggestive of a mirror-image. It may be associated with a tendency for the zygote to divide later during embryogenesis, around the time when the body normally determines its symmetry (3). The mirror-image phenomenon in monozygotic twins can be found in the literature. Published data suggests that approximately 25% of this population manifests this characteristic, typically associated with the tissues of ectodermic origin (4). It is believed that the presence of phenotypical discordances in identical twins may be the result of epigenetic influences during development (4,5).

Conclusions: The dental anomalies described here, although rare, when diagnosed in a child with a monozygotic twin, constitute a find which warrants a screening of the same pathology on the twin.

References:

an Journal of Medical Genetics, 51 (1994), pp. 41-45;