**Third molar agenesis in modern humans with and without agenesis of other teeth**

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**Appendix Table 1**. Distribution of the total number of missing teeth per individual in the agenesis sample, excluding third molars.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Missing teeth | Frequency | Percentage (%) |
|  | 1 | 117 | 38.6 |
|  | 2 | 101 | 33.3 |
|  | 3 | 24 | 7.9 |
|  | 4 | 24 | 7.9 |
|  | 5 | 10 | 3.3 |
|  | 6 | 3 | 1 |
|  | 7 | 6 | 2 |
|  | 8 | 2 | 0.7 |
|  | 9 | 4 | 1.3 |
|  | 10 | 4 | 1.3 |
|  | 11 | 1 | 0.3 |
|  | 12 | 2 | 0.7 |
|  | 13 | 1 | 0.3 |
|  | 14 | 3 | 1 |
|  | 20 | 1 | 0.3 |
| Total | 799 | 303 | 100 |

**Appendix Table 2.** Most common patterns of tooth agenesis observed in the agenesis group including third molars.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Index | Frequency (%) | Missing teeth | Index | Frequency (%) | Missing teeth |
| **Maxilla** | **Mandible** |
| 1 | 31/220 (14.1) | 12, 22 | 1 | 30/234 (12.8) | 35, 45 |
| 2 | 30/220 (13.6) | 18, 28 | 2 | 24/234 (10.3) | 35 |
| 3 | 17/220 (7.7) | 22 | 3 | 20/234 (8.5) | 45or35, 38, 45, 48 |
| 4 | 16/220 (7.3) | 12 | 4 | 16/234 (6.8) | 38, 48 |
| 5 | 12/220 (5.5) | 15, 18, 25, 28 | 5 | 13/234 (5.6) | 38, 45, 48 |
| Overall | 106/220 (48.2) |  | Overall | 103/234 (44.0) |  |
| **Whole dentition** |
| 1 | 22/303 (7.3) | 12, 22 |
| 2 | 16/303 (5.3) | 35 or 45 |
| 3 | 15/303 (5.0) | 22 |
| 4 | 14/303 (4.6) | 35, 45 |
| 5 | 12/303 (4.0) | 12 |
| Overall | 79/303 (26.1) |  |

**Appendix Table 3.** Most common patterns of third molar agenesis observed in control individuals.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Index | Frequency (%) | Missing teeth | Index | Frequency (%) | Missing teeth |
| **Maxilla** | **Mandible** |
| 1 | 26/43 (60.5) | 18, 28 | 1 | 27/48 (56.3) | 38, 48 |
| 2 | 11/43 (25.6) | 18 | 2 | 12/48 (25) | 48 |
| 3 | 6/43 (14.0) | 28 | 3 | 9/48 (18.8) | 38 |
| Overall | 43/43 (100) |  | Overall | 48/48 (100) |  |
| **Whole dentition** |
| 1 | 17/62 (27.4) | 18, 28, 38, 48 |
| 2 | 9/62 (14.5) | 38, 48 |
| 3 | 6/62 (9.7) | 38 |
| 4 | 5/62 (8.1) | 28 or 18or 18, 48 |
| 5 | 4/62 (6.5) | 18, 28 or48 |
| Overall | 50/62 (80.6) |  |

**Appendix Table 4.** Most common patterns of third molar agenesis observed in the agenesis subjects.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Index | Frequency (%) | Missing teeth | Index | Frequency (%) | Missing teeth |
| **Maxilla** | **Mandible** |
| 1 | 88/118 (74.6) | 18, 28 | 1 | 88/124 (71.0) | 38, 48 |
| 2 | 17/118 (14.4) | 28 | 2 | 20/124 (16.1) | 38 |
| 3 | 13/118 (11) | 18 | 3 | 16/124 (12.9) | 48 |
| Overall | 118/118 (100) |  | Overall | 124/124 (100) |  |
| **Whole dentition** |
| 1 | 59/154 (38.3) | 18, 28, 38, 48 |
| 2 | 19/154 (12.3) | 38, 48 |
| 3 | 16/154 (10.4) | 18, 28 |
| 4 | 13/154 (8.4) | 38 |
| 5 | 8/154 (5.2) | 28 or 18, 28, 48 |
| Overall | 123/154 (79.9) |  |

**Appendix Figure 1.** Four randomly selected panoramic radiographs from the tested sample.