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<th><strong>Title</strong></th>
<th>Stenotrophomonas maltophilia genotypes from oral rinse samples of Tibetan children</th>
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<td><strong>Author(s)</strong></td>
<td>Leung, WK; Cheung, BPK; Jin, LJ; Samaranayake, LP; Corbet, EF</td>
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INTRODUCTION

Tibetans are one of few tribal groups in the World that reside at high altitudes. Little information on their oral health status or their oral microflora is available. Recently, we conducted an oral health status survey of inhabitants of Lhasa and found that in children, the treatment need for dental caries was low while their periodontal health status was unsatisfactory (Lo et al., 2000). The periodontal health status of the Lhasa adults surveyed was also considered to be unsatisfactory (Corbet et al., 2000). Similar oral health conditions were detected in both the native Tibetans and Han Chinese living in Lhasa. However, no information is available in the literature relating the impact of this unique living environment, lifestyle, and poor periodontal health to human oral microbiology. We reported earlier from the same group high prevalence (82%) of coliforms carriage of Tibetans in Lhasa. J Dent Res 1999: 78:257, abstr. 1213. Lo ECM, Jin LJ, Zee KY, Leung WK, Corbet EF. Oral health status and treatment need of 11-13-year-old urban children in Tibet, China. Community Dent Health 2000: 17:161-166.

RESULTS

Unweighted pair group method with arithmetic means (UPGMA) of 11-13 year-old Tibetan children at two primary schools.

MATERIALS AND METHODS

Bacterial stains
- 62 Stenotrophomonas maltophilia isolates (range: 0-3 isolate/person) from 50 11-13 year-old Tibetan children at two primary schools.
- Randomly amplified polymeric DNA (RAPD)
  - Primers: AP4- 5'TCAAGCTGCA3' (Williams et al., 1990)
  - AP12H-5'CGGCCCTGT3'

CONCLUSION

1. S. maltophilia of different clonal types appeared to be able to colonize oral cavities of Tibetan children with great ease.
2. The relevance of high colonization of S. maltophilia in Tibetan children is worthy of further study.

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REFERENCES


Fig. 1. Typical RAPD profiles of different clonal types of Stenotrophomonas maltophilia isolated from 50 Tibetan children living in Lhasa, Tibet Autonomous Region. The bands were amplified by two sets of primers AP4 or AP12H respectively. The dendrogram was constructed by unweighed pair group method with arithmetic means (UPGMA clustering analysis). Analysis by computer software (Neanihose, 1990) indicated that occurrence at S AB = 0.75 to denote the threshold selected to subgroup closely related clusters of isolates. Three and five major clonal sub-groups (asterisks) were discernable using primers AP4 or AP12H respectively. A dashed line is drawn to indicate the separation of two major clonal sub-groups but the clonal type described by the same clonal group. A, B and C show distinctly different clonal groups of S. maltophilia strains as detected by RADP using primers (A) AP4 and (B) AP12H. A dashed line is drawn at S = 0.75 to denote the threshold selected to subgroup closely related clonal types. Three and five major clonal sub-groups (asterisks) were discernable using primers AP4 or AP12H respectively.