

## LETTERS TO THE EDITOR

### Dominantly inherited cleft lip and palate

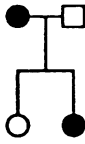
We read with interest two reports<sup>1,2</sup> of dominantly inherited cleft lip and palate (CLP). We have recently ascertained 82 families through probands with CLP evaluated in SE Minnesota during the period 1935 to 1986.<sup>3</sup> These probands and other family members were identified using the Mayo Clinic Medical Linkage Registry. Eleven families (13%) were found to have multigenerational CLP segregating in what is suggestive of an autosomal dominant pattern (figure).<sup>3</sup> CLP in the remaining 69% families were isolated cases without any other affected family

members. The recurrence risk in the multigenerational families was greater than would be expected assuming multifactorial inheritance. Segregation analysis is currently being performed to test which model, multifactorial, single gene, or mixed model, best explains the recurrence in these families. There may be two forms of CLP, a dominantly inherited form and one occurring sporadically. Recent reports of CLP linkage to factor 13A<sup>4</sup> and transforming human growth factor alpha (TGFA) have suggested a single gene locus for CLP in some cases. This will also be tested in multigenerational families and may provide a method of performing molecular diagnosis and more accurate genetic counselling for families.

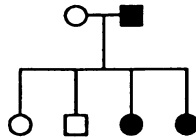
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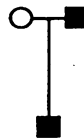
- 1 de Paepe A. Dominantly inherited cleft lip and palate. *J Med Genet* 1989;26: 794.
- 2 Temple K, Calvert M, Plint D, Thompson E, Pembrey M. Dominantly inherited cleft lip and palate in two families. *J Med Genet* 1989;26: 386-9.
- 3 Hecht JT, Annegers JF. Familial component of epilepsy in cleft lip and palate. *University Microfilms International*, 1988.
- 4 Eiberg H, Bixler D, Nielson S, Conneally PM, Mohr J. Suggestion of linkage of a major locus for a nonsyndromic orofacial cleft with F13A and tentative assignment to chromosome 6. *Clin Genet* 1987;32:129-32.
- 5 Ardinger HH, Buetow KH, Bell GI, Bardach J, Van Demark DR, Murray JC. Association of genetic variation of the transforming growth factor alpha gene with cleft lip and palate. *Am J Hum Genet* 1989;45:348-53.



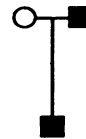
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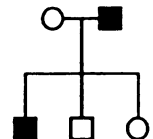
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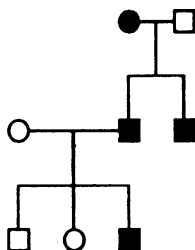
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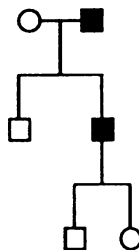
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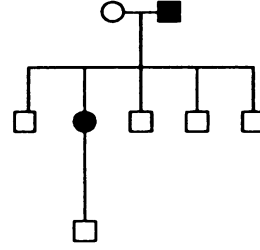
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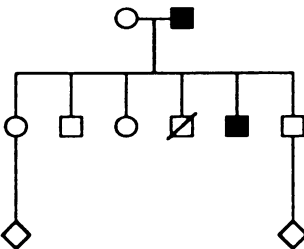
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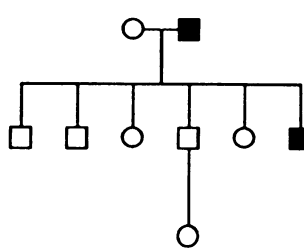
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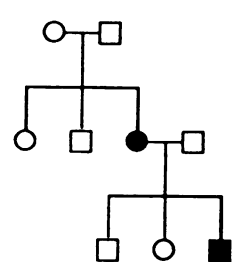
Family 8



Family 9



Family 10



Family 11

*Family pedigrees.*