

- of plasma estradiol-17 β , LH, FSH and progesterone. *Am J Obstet Gynecol* 138:383-390, 1980
5. MILHAM S: Pituitary gonadotrophin and dizygotic twinning. *Lancet* ii:566, 1964
 6. BULMER MG: *The Biology of Twinning in Man*. Oxford, Clarendon Press, 1970
 7. JAMES WH: Coitus-induced ovulation and its implications for estimates of some reproductive parameters. *Acta Genet Med Gemellol (Roma)* 33:547-555, 1984
 8. BULMER MG: The effect of parental age, parity and duration of marriage on the twinning rate. *Ann Hum Genet* 23:454-458, 1959
 9. POLLARD GN: Multiple births in Australia 1944-63. *J Biosoc Sci* 1:389-404, 1969
 10. ALLEN G, SCHACHTER J: Ease of conception in mothers of twins. *Soc Biol* 18:18-27, 1971
 11. ROYSTON JP: Basal body temperature, ovulation and the risk of conception with special reference to the lifetimes of sperm and egg. *Biometrics* 38:397-406, 1982
 12. BARRETT JC: The fertile period, frequency of intercourse and risk of conception. *IRCS Med Sci* 13:513, 1985
 13. DEAN G, KEANE T: An investigation of the high twinning rate in the Republic of Ireland. *Br J Prev Soc Med* 26:186-192, 1972

ERROR DETECTED IN PUBLISHED LOD SCORES

To the Editor: In the recent paper by Kondo and Hamaguchi [1], there appears to be an error in the calculation of lod scores between the *ESD* and *LCPI* loci. Table 1 reports a lod score of 2.114 ($\theta = 0$) for family D. However, because phase cannot be unequivocally assigned in either the parents or grandparents, the correct lod score (based on the published pedigree) is 1.806 as calculated using both the computer programs LIPED [2] and LINKAGE [3] (the correct scores for the other θ values are 1.584, 1.351, 0.863, 0.401, and 0.093 for .05, .10, .20, .30, and .40, respectively). Either an incorrect number of informative events was used to calculate these values or phase was erroneously assumed to be unambiguous. It is fortunate that these errors, although reducing the summed lod scores, do not change the conclusion of close linkage between *ESD* and *LCPI*.

Although lod scores for simple pedigrees can be relatively simple to calculate, particularly at a recombination fraction of 0.00, and tables to aid such calculations exist, I strongly urge the use of computer programs such as LIPED and LINKAGE even for simple pedigrees in order to reduce such possible errors of calculation.

JONATHAN L. HAINES¹

REFERENCES

1. KONDO I, HAMAGUCHI H: *Am J Hum Genet* 37:1106-1111, 1985
2. OTT J: *Am J Hum Genet* 26:773-775, 1974
3. LATHROP GM, LALOUEL JM, JULIER C, OTT J: *Proc Natl Acad Sci USA* 81:3443-3446, 1984

Received February 6, 1986.

¹ Department of Medical Genetics, James Whitcomb Riley Hospital for Children RR 129, Indiana University Medical Center, 702 Barnhill Drive, Indianapolis, IN 46223.