Short communication


Linkage relations of locus for X-borne type of Charcot-Marie-Tooth muscular atrophy and that for Xg blood groups

Summary. The locus for the X-borne type of Charcot-Marie-Tooth muscular atrophy is not close to the Xg locus and probably not within direct measurable distance of it.

Details of a large Dutch kindred in which Charcot-Marie-Tooth peroneal muscular atrophy (CMT) is segregating as an X-borne partially dominant character will be reported in due course: this note concerns only the one section of the pedigree which gives information about the linkage relations of the locus for CMT and that for the Xg blood groups.

The lod scores are given in the Table: they certainly rule out close linkage and suggest that the distance between the two loci is too great for direct measurement.

As far as we know, only one other kindred with X-borne CMT has been tested for Xg: in 1975 samples from Sweden were sent to the Blood Group Unit by Dr J. Lindsten, but the Xg segregation gave no linkage information.

G. L. Daniels, and Patricia Tippett

TABLE
CHARCOT-MARIE-TOOTH AND Xg: LOD SCORES

<table>
<thead>
<tr>
<th>Children of</th>
<th>Recombination fraction, θ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.05</td>
</tr>
<tr>
<td>V.9, z1, 2:1</td>
<td>-0.721</td>
</tr>
<tr>
<td>V.10, z1, 4:2</td>
<td>-1.185</td>
</tr>
<tr>
<td>V.11, z1, 2:2, c1 2:2</td>
<td>-1.469</td>
</tr>
<tr>
<td>Sum of lods</td>
<td>-3.375</td>
</tr>
</tbody>
</table>

The generation and individual numbers are those of the pedigrees of the whole kindred.

C. J. de Weerdt,
Department of Neurosurgery,
University Hospital, Groningen
and Schepersziekenhuis, Emmen,
The Netherlands.
Linkage relations of locus for X-borne type of Charcot-Marie-Tooth muscular atrophy and that for Xg blood groups.

C J de Weerdt

doi: 10.1136/jmg.13.5.399