

We evaluated the relative frequency of each mode of inheritance in the large group of CMT families gathered in the DNA laboratory of the Dept. of Child Neurology of the 2nd Medical School (including families with already detected causal mutations). The frequency of dominant and sporadic forms is approximately equal (40% of families). In a small percentage of families (20%), the autosomal recessive (AR) mode of inheritance (two or more affected siblings) was recognized. In the rest of the families (18%) there are not enough reliable data on the clinical state of the family members to indicate the mode of inheritance. Further we evaluated the relative frequency of inheritance modes in the "unconfirmed" group of CMT families without detected causal mutation (which previously tested negative for the CMT1A / HNPP forms and / or for mutations in some of the following CMT-associated genes - Cx32, MPZ, PMP22, EGR2, NEFL, SIMPLE). The frequency of dominant and sporadic forms in this group is somewhat different from the large cohort of families. The frequency of dominant pedigrees is lower (30%) and the frequency of sporadic cases higher (50%). This may indicate that, in general, we can expect the detection rate of CMT causes to be higher in dominant pedigrees compared to sporadic CMT cases. In this study I have estimated the frequency of mutations in the early growth response factor 2 gene (EGR2) among Czech patients with demyelinating form of CMT (CMT1) and with excluded most common CMT forms (CMT1A and HNPP). This frequency is 2,2%; (1 patient/family with detected causal mutation among 46 tested).