

Neural Tube Defects in Induced Abortions

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Aim. To determine the frequency and relative proportion of fetuses with neural tube defects at autopsy in the population of artificially aborted fetuses with congenital anomalies, as well as the relative proportion of malformation types, their sex distribution, and association with non-neural anomalies.

Methods. From 1986 to 1991, the autopsies on 179 fetuses (85 male, 91 female and 3 of undetermined sex) were performed. The pregnancies were terminated on the basis of the ultrasound examination, amniocentesis, maternal serum alpha-fetoprotein measurement, and chromosomal analysis. All autopsies were performed by the same technique. The observed frequencies were tested with the chi-square test that included the continuity correction factor.

Results. The autopsy revealed various congenital anomalies in 172 fetuses. They mostly involved the central nervous system (79 fetuses, 44.1%). Other seven fetuses showed generalized fetal hydrops of an unknown cause. CNS anomalies were found in 33 male and 46 female fetuses. Neural tube defects were present in 55 fetuses (23 male and 32 female): 27 anencephalic fetuses, and 28 fetuses with the spina bifida. There were no sex differences ($p=0.66$) between the anencephaly and spina bifida group. Neural tube defects represented 32.0% of all congenital anomalies in our consecutive series with the frequency of 2.63/1,000 births. Neural tube defects were more frequent in female fetuses, but the difference was not statistically significant ($p=0.49$).

Conclusions. Neural tube defects were the most common congenital anomalies. Fetal autopsy data are a very important source in the analysis of congenital anomalies, including neural tube defects.

Key words: *neural tube defect; abnormalities; central nervous system; autopsy*

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