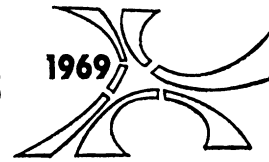


A General Description of 315 Cleft Lip and Palate Patients



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An accurate family history and course of pregnancy were obtained from the parents of 315 cases with clefts of the lip and palate. A total of 170 points were assembled and transferred to punchcards according to the binary principle. From the results, the frequency percentage was calculated and, where possible, compared to the statistical data from the general state population with the chi-square test (6, 27, 28). The clinical findings corresponded to the relations obtained from the literature so that the group (random sample) can be accepted as typical (2, 4, 8, 10, 11, 12). Out of the total sample, 64 children of school age were examined according to the following psychological methods (5, 15, 16): German form of the WISC (HAWIK); and German form of the Vineland Maturity Scale. In addition, obtained were a sociogram of the child's school class; a questionnaire regarding social status of the child, physical, mental and social development (answered by the mother); a questionnaire regarding social relations of the child (answered by the child); and a questionnaire regarding school efficiency and social relations of the child (answered by the teacher).

Results

GENERAL FINDINGS. The age peak of the mother was between 20 and 25 years (35.3%); in only 2.7% was the mother under 20 or over 40 years of age. The total age distribution corresponds to the normal distribution (statistically significant). Ten per cent of the mothers were uneducated workers, 11.8% had a special education, and 78.2% were housewives. Of the women, 74.5% claimed to have worked strenuously even during the pregnancy (13).

Of the fathers, 42.8% were either self-employed or handworkers; the

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farming occupation was least well represented (11.7%). The maximum age distribution of the fathers of the subjects was between 18 and 30 years (48.2%). Of the fathers, 22.2% were over 40 years of age. The statistical comparison with the distribution of the fathers in the normal population showed no differences (28).

Observation of the sequence of birth shows that the first born predominate (37.8%) over the second born (32%), and over the third and later born (30.2%). Statistical comparison with the sequence of birth in the normal population shows no differences (28). The number of second, third, and later born among the cleft subjects increases with the increase in the age of the mother. Statistical comparison with the normal population shows no differences; therefore, no connection between the age of the mother and the sequence of birth appears to exist for the frequency of clefts (7, 10, 12, 19, 20, 29, 31).

Greatest incidence of clefts was found in families with two children (27%); next greatest was in families with three children (25.2%); and least incidence was found in families with an only child (20.7%). Even this distribution corresponds to the normal population. Of the mothers, 19.7% had had one or more miscarriages. This is a significant increase over the normal population, which, however, should be cautiously evaluated since a substantial concealed figure is to be reckoned with (1, 10, 11, 21, 23, 31).

COURSE OF PREGNANCY. Of the mothers, 33% first noticed the pregnancy later than 4 weeks after conception; in 22% the child was not desired. Of the mothers, 152 (48.3%) had morning sickness; 36 (11.4%) had vaginal bleeding; and 14 (4.4%) had premature contractions or cramps. A severe attack of the flu was experienced by 34 (10.8%) during the first three months. Six patients had infectious diseases during the first three months (hepatitis, rubella, et cetera). In 6 (1.9%), a radiological examination was executed (3, 10, 13, 18, 22, 26).

Of the mothers, 3.2% had used sleeping draughts during the first three months, 45% had used other medicines; of these, 20.4% used them during the first three months of pregnancy (9, 14, 18). To a moderate extent, alcohol was consumed by 30%; 6.45% smoked (24, 30); a total of 36.6% claimed to have undergone psychic strain during the first three months of pregnancy.

The period of pregnancy was normal in 256 cases (81.2%). The weight at birth was normal in 151 cases (47.9%), and was high in 123 cases (39.1%). (Normal weight was assumed as 3400 grams for boys and 3200 grams for girls.) A general retardation in development does not appear to have been present.

In 76.3%, the spacing between subsequent births lay between 1 and 4 years; in 7.6%, under one year, and in 16.1%, the spacing was longer than 5 years. Consequently, no relationship between spacing between births and the incidence of cleft palate is obvious.

Family History

In 71 cases (22.5%), clefts of the lip and palate could be traced within the family (2, 17, 25). In 17 cases (5.4%), congenital heart failure was known to exist in the family.

Other Findings

Of the 315 patients, 184 were male (59.6%). This is a statistically significant difference between the sexual proportion of the normal population. Combined cleft forms are twice as frequent as isolated ones. The males evidenced more combined cleft forms significantly.

In 23.5% of the cases, the subjects had additional anomalies; 6.3% had three or more anomalies. In 21 (6.7%), an asymmetry of the skull and face was observed. The hairline of the nape was particularly low in 6.7%. Dysplastic or low placed ears was found in 8.6%; heart failure in 2.8%; and debility in 5.4%. Anomalies of the lip and strabism were each represented in 4.76% of the group. Inguinal hernia was found in 1.6%; kryptorchism existed in 3.5% of the cases. Finger anomalies were found in 20.4%; short fingers, syndactyl, polydactyl and clinodactyl were also seen. The Dubois sign was found in 35%.

The obtained intelligence quotients for the group were divided into seven classes. The obtained distribution corresponded statistically to the expected normal distribution (15). Similarly, there was no difference in verbal and manual IQ (15). In the questionnaire, the mothers did not report any noticeable differences between the patients and their brothers and sisters concerning physical and mental development. This finding corresponds entirely with the results found in the questionnaire from the children and the teachers. This subjective finding in the questionnaire was controlled objectively through the sociogram, which was taken in school classes. On the basis of the sociograms, only three children appeared outside the average regarding their behavior. Two children were clearly less well-behaved and one child better behaved than their average classmates. The maturity scale of the cleft palate subjects was also what would be expected from children of corresponding ages in the normal population; that is, the points on the scale rose continually with the age, as one would expect on the basis of constructiveness of social maturity.

Summary

Observations and peristatic previous history were assembled for 315 cases of cleft lip and cleft palate. In comparison with the normal population, the results show no statistical significance. From a random sample of 60 children within school age, the IQ and the social development were investigated. No variations were shown in comparison to the normal population.

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