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Psychiatric aspects of mongolism

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PSYCHIATRIC ASPECTS OF MONGOLISM

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PSYCHIATRIC ASPECTS OF MONGOLISM

THE FREQUENCY AND TYPES OF PSYCHIATRIC PROBLEMS NOTED IN MENTALLY RETARDED CHILDREN HAS BEEN REVIEWED BY A NUMBER OF WORKERS IN THIS FIELD OF MENTAL RETARDATION. (9,10,14,18,19,21,25,26,28,30) THE PSYCHIATRIC PROBLEMS REPORTED IN A PARTICULAR GROUP OF MENTALLY RETARDED CHILDREN, THE MONGOLOID CHILD (DOWN'S SYNDROME), HAVE BEEN WIDELY DIVERGENT AS TO WHAT ARE CONSISTENT FINDINGS. THE MAJORITY OF THE WORKERS IN THIS FIELD HAVE CONSIDERED THE MONGOLOID CHILD TO BE THE "PRINCE CHARMING" (26) OF THE MENTALLY RETARDED. (5,9,13,14,18,27,28,31) THE MONGOL IS CHARACTERIZED BY HIS CHEERFUL DISPOSITION, AFFABILITY, AMUSING MIMICRY, AND INDISCRIMINATE AFFECTION TO OTHERS. HE IS ALLEGED TO BE CURIOUSLY IMMUNE TO SUCH ALIENATING TRAITS AS TEMPER TANTRUMS, OVER-AGGRESSIVENESS, NEGATIVISM, AND OTHER PSYCHIATRIC DISORDERS FREQUENTLY SEEN IN OTHER RETARDATEES. HOWEVER, SOME WORKERS HAVE DESCRIBED FREQUENT MAJOR EMOTIONAL PROBLEMS IN THE MONGOLOID POPULATION. (6,10,25,26,30) FOR EXAMPLE, ROLIN (26) STATES THAT SIXTY PER CENT OF HIS SERIES HAD MAJOR PSYCHIATRIC DISTURBANCES WITH

SPECIAL REFERENCE TO THE PRIMITIVE CATATONIC REACTIONS. WEBSTER (30) REPORTED THAT ALL MENTALLY RETARDED CHILDREN HAVE SOME ELEMENT OF EMOTIONAL DISTURBANCE, THOUGH HE REPORTS NO SEVERE EMOTIONAL DISTURBANCES IN THE MONGOL. BELEY (2) DESCRIBES TRANSITIONAL FORMS OF EMOTIONAL DISTURBANCE IN THESE CHILDREN.

THUS, THERE IS MUCH APPARENT DISAGREEMENT AS TO THE TYPE AND FREQUENCY OF PSYCHIATRIC DISTURBANCES IN THE MONGOLOID CHILDREN REPORTED IN THE LITERATURE.

THE PURPOSE OF THIS PAPER IS TO STUDY THE RESULTS OF A FIVE YEAR PILOT PROJECT IN THE DIAGNOSTIC EVALUATION OF MENTALLY RETARDED CHILDREN, WHEREIN A TOTAL OF 86 CHILDREN WERE DIAGNOSED AS MONGOLS, IT IS THE AUTHOR'S INTENTION TO REVIEW AND EVALUATE THE MONGOLOID CHILDREN WHO DISPLAYED PROMINENT PSYCHIATRIC PROBLEMS, IN AN EFFORT TO SHED FURTHER LIGHT ON THE FREQUENCY, TYPE, AND POSSIBLE ETIOLOGICAL FACTORS IN THE PRODUCTION OF THESE EMOTIONAL DISTURBANCES.

THE SOURCE OF THE POPULATION STUDIED IS THE MENTAL RETARDATION PILOT, SCREENING, AND TREATMENT UNIT AT NEBRASKA PSYCHIATRIC INSTITUTE. THESE

ARE CHILDREN UNDER SIX YEARS OF AGE, WITH CERTAIN EXCEPTIONS, WHICH HAVE BEEN REFERRED TO NEBRASKA PSYCHIATRIC INSTITUTE BY VARIOUS SOURCES BECAUSE OF SUSPICION OF MENTAL RETARDATION.

THE MULTI-DISCIPLINE PROGRAM IS EMPLOYED IN THE STUDY OF THESE CHILDREN. EACH CHILD IS SEEN BY A CLINICAL TEAM INCLUDING A PEDIATRICIAN, NEUROLOGIST, PSYCHOLOGIST, PSYCHIATRIST, SPEECH AND HEARING SPECIALIST, AND SOCIAL WORKER. MEDICAL STUDENTS AND RESIDENTS IN MEDICINE, PEDIATRICS, AND PSYCHIATRY ALSO PARTICIPATE. THE PARENTS ARE INTERVIEWED BY A SOCIAL WORKER AT THE INSTITUTE AND IN THEIR HOMES. THE PATIENT RECEIVES ROUTINE LABORATORY TESTS CONSISTING OF: COMPLETE BLOOD COUNT; URINALYSIS, INCLUDING A TEST FOR PHENYLKETONURIA; BLOOD SEROLOGY; X-RAYS OF THE SKULL, CHEST, PELVIS, AND WRIST; AND AN ELECTROENCEPHALOGRAM. SOME OF THE CHILDREN DID NOT RECEIVE THE ENTIRE BATTERY OF TESTS BECAUSE OF INACCESSIBILITY.

CYTOGENETIC STUDIES WERE MADE ON SOME OF THE CHILDREN IN WHOM THE DIAGNOSIS OF MONGOLISM WAS QUESTIONABLE FROM A CLINICAL STANDPOINT. MONGOLS,

WITH RARE EXCEPTION (23), HAVE 47 CHROMOSOMES INSTEAD OF THE NORMAL COMPLEMENT OF 46, WITH AN EXTRA AUTOSOME IN PAIR 21. (7,15,16)

THE DIAGNOSIS OF MONGOLISM IS NOT ALWAYS A SIMPLE MATTER. MORE THAN 50 STIGMATA HAVE BEEN DESCRIBED AS CHARACTERISTIC OF MONGOLISM. (5,11,12,13,18,20,22,28,29) THE PROBLEM IS THAT NONE OF THESE STIGMATA IS FOUND EXCLUSIVELY IN THE DOWN'S SYNDROME, AND NO SINGLE SIGN IS FOUND IN ALL MONGOLS. ALSO COMPLICATING DIAGNOSIS IS THE TRANSITORY NATURE OF THESE STIGMATA. SOME DO NOT APPEAR UNTIL TWO OR THREE YEARS AFTER BIRTH AND OTHERS DISAPPEAR WITH AGING. (11,28) THERE IS MUCH DISAGREEMENT IN THE LITERATURE AS TO WHICH CRITERIA SHOULD BE REQUIRED TO CONFIRM THE DIAGNOSIS. PENROSE (22) LISTS SEVEN STIGMATA, WITH A MINIMUM OF FOUR BEING REQUIRED TO DIAGNOSE MONGOLISM. THEY ARE: (1) AN I.C. OF 15-24; (2) A CEPHALIC INDEX OF .83 OR MORE (BRACHYCEPHALY); (3) EPICANTHIC FOLDS OVER ONE OR BOTH EYES; (4) A SIMIAN LINE ON ONE OR BOTH HANDS; (5) A LARGE, FISSURED TONGUE; (6) CONJUNCTIVITIS PRESENT AT THE TIME OF EXAMINATION; (7) A SHORT, CURVED LITTLE FINGER WITH ONLY ONE KNUCKLE CREASE.

ROLLIN (26) USES A SLIGHT VARIATION OF THIS LIST. TREEGOLD (28) DESCRIBES MANY SIMILAR SIGNS OF MONGOLISM, BUT DOES NOT REQUIRE ANY CERTAIN NUMBER TO CONFIRM THE DISEASE. ANY BORDERLINE CASES HE REFERS TO AS "SEMI-MONGOLS".

SOME OF THE MANY STIGMATA MENTIONED IN THE LITERATURE ARE BRUSHFIELD SPOTS ON THE IRIS, HYPERMETROPIA, MYOPIA, NYSTAGMUS, ASTIGMATISM AND CATARACTS. THE HANDS ARE BROAD AND FLABBY WITH A SPADE-LIKE SHAPE BECAUSE OF THE SHORTENED THUMB AND LITTLE FINGER. THE FEET HAVE WIDE-SPACED FIRST AND SECOND TOES WITH A LONGITUDINAL PLANTAR FURROW. SUPERNUMERARY DIGITS AND SYNDACTYLY ARE NOT UNCOMMON. THE FACE HAS ROUGHENED, FLUSHED SKIN OVER THE CHEEKS. THE MOUTH IS USUALLY OPEN AND THE PALATE IS HIGH AND ARCHED. THE EARS ARE SMALL WITH SMALL LOBES, LOW-SET AND FLATTENED AGAINST THE HEAD. THE STATURE IS BELOW NORMAL. THE ABDOMEN IS PROTUBERANT AND HYPOGENES IS OF THE GENITALIA IS COMMON. THE JOINTS ARE HYPER-EXTENSIBLE AND THE MUSCLES HYPOTONIC. RADIOLOGIC FINDINGS ASSOCIATED WITH MONGOLISM ARE: DELAYED OSSIFICATION OF THE CARPAL BONES, FLARING OF THE

ILIAC CRESTS AND A FLATTENED ACETABULUM.

THE FOREGOING DESCRIPTIVE ASPECTS OF THE DIAGNOSTIC CONSTELLATION OF SYMPTOMS THAT REPRESENT THE ENTITY TERMED "MONGOLISM" IS NECESSARY BECAUSE OF THE APPARENT DISCREPANCY IN THE LITERATURE CONCERNING THE CARDINAL FEATURES OF THIS DISORDER. THE DIAGNOSTIC ASPECTS OF THIS GROUP OF MONGOLOID CHILDREN HAS BEEN REPORTED (20) FOR THE ENTIRE SAMPLE STUDIED ON THE MENTAL RETARDATION PROJECT AT NEBRASKA PSYCHIATRIC INSTITUTE.

THE ELEVEN CHILDREN DESCRIBED IN THIS PAPER ARE DEPICTED IN CHART I. THE DIAGNOSTIC SIGNS MOST FREQUENTLY OBSERVED IN THESE CHILDREN ARE FOUND IN CHART II WITH THE PRESENCE OR ABSENCE OF THESE SIGNS NOTED FOR EACH CHILD.

OF THE 86 MONGOLOIDS STUDIED ON THE NEBRASKA PSYCHIATRIC INSTITUTE'S PROJECT, 11 OF THEM WERE FELT TO HAVE PSYCHIATRIC PROBLEMS BY THE CLINICAL STAFF. THE PSYCHIATRIC DIAGNOSES OF THESE 11 CHILDREN ARE DENCTED IN CHART III.

IT IS IMPORTANT TO VIEW THE EMOTIONAL DISTURBANCES THAT THESE CHILDREN DISPLAYED IN LIGHT OF THE GENERAL BACKGROUND OF THE TOTAL EVALUATIONS THAT WERE PERFORMED. CHART IV

CASE NUMBER	INITIALS	SEX	AGE WHEN EVALUATED
1	T.H.	F	3.75
2	R.F.	M	3.5
3	H.L.	F	3.0
4	K.S.	M	3.0
5	C.A.	F	3.0
6	R.M.	F	3.5
7	G.F.	M	3.5
8	R.T.	M	3.5
9	C.C.	M	3.5
10	R.G.	M	6.5
11	B.L.	F	7.5

TABLE IV. MONOCLOID CHILDREN
WITH PSYCHIATRIC DISTURBANCES

CHRONIC BRAIN SYNDROME WITH PSYCHOTIC REACTION 1
 CHRONIC BRAIN SYNDROME WITH BEHAVIORAL REACTION 7
 CHRONIC BRAIN SYNDROME WITH ADJUSTMENT REACTION 3
 TOTAL 11

TABLE III. MONOCLOID ENTITIES NOTED
IN ELEVEN MONOCLOID CHILDREN*

*THE DIAGNOSTIC ENTITIES NOTED ABOVE ARE IN KEEPING WITH THE NOMENCLATURE OF THE AMERICAN PSYCHIATRIC ASSOCIATION. (24)

CASE NUMBER	1	2	3	4	5	6	7	8	9	10	11
AGE WHEN EVALUATED	3.75	3.5	7.0	3.0	5.0	5.5	9.5	5.5	7.5	4.5	6.5
CHARACTERISTIC											
FACIAL FEATURES	P	P	P	P	P	P	A	P	P	P	P
BRACHYCEPHALIC											
HEAD CONFIGURATION	A	P	P	P	P	P	A	A	P	A	P
EPICANTHIC FOLDS	P	P	P	P	P	P	P	P	P	P	P
BRUSHFIELD SPOTS	A	P	A	P	A	P	A	A	P	N.S.	P
LARGE, FURROWED TONGUE	A	P	P	P	P	P	A	A	P	P	P
HIGH, ARCHED PALATE	P	P	P	P	P	P	P	P	P	N.S.	A
SPADE-SHAPED HAND	P	P	P	P	P	P	P	P	P	P	P
SIMIAN LINE	P	A	P	P	P	P	P	P	P	P	P
WIDELY SPACED 1ST AND 2ND TOE	P	P	P	P	P	P	P	A	P	N.S.	P
PLANTAR FURROW	P	P	P	P	P	P	A	A	P	N.S.	P
HYPOTONIA	P	P	A	P	P	P	P	P	P	P	P
SMALL STATURE	P	P	P	P	P	P	A	P	P	P	P
OTHER	-	-	-	-	-	-	*3	*4	-	*5	-
RADIOLOGIC SIGNS:											
PELVIC ABNORMALITY	A	P	P	P	P	N.C.	A	A	A	A	P
DELAY IN OSSIFICATION	P	A	A	A	A	N.C.	A	A	A	A	P
OTHER	-	-	-	*1	*2	N.C.	-	-	-	*6	-

CHART II: ASSOCIATED STIGMATA

P - PRESENT

A - ABSENT

N.S. - NOT SPECIFIED

N.C. - NOT COMPLETED

*4 - SUPERNUMERARY THUMBS

*1 - QUESTION OF AN INTRAABDOMINAL MASS

*2 - INCREASE IN SIZE OF SELLA TURSIKA

*3 - AGNATHIA AND DISPROPORTIONATELY LONG LIMBS ON THIS CHILD CAST DOUBT ON THE DIAGNOSIS OF MONGOLISM

*5 - SEVERE ESOTROPIA

*6 - CONGENITAL HEART WITH CARDIOMEGALY

CASE NUMBER	1	2	3	4	5	6
PSYCHIATRIC DIAGNOSIS	C.B.S. C B,	C.B.S. C B,	C.B.S.	C.B.S. C ADJ. Rx,	C.B.S. C ADJ. Rx,	C.B.S. C B,
DEGREE OF RETARDATION						
MENTAL *1	MOD.	M	SEV.	M	MOD.	M
SPEECH	SEV.	SEV.	SEV.	SEV.	N	SEV.
HEARING	SEV.	N	N	N	N	N
EEG	AB.	N	AB.	N	NT	AB.
CYTOGENETIC STUDY	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.
SEVERE MEDICAL ILLNESS	--	--	*2	--	*3	--
FAMILY PSYCHO- PATHOLOGY	S	S	S	R	A	S
<u>CASE NUMBER</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	
PSYCHIATRIC DIAGNOSIS	C.B.S. C B,	C.B.S. C B,	C.B.S. C P,	C.B.S. C B,	C.B.S. C ADJ. Rx,	
DEGREE OF RETARDATION						
MENTAL *1	MOD.	SEV.	SEV.	SEV.	MOD.	
SPEECH	MOD.	SEV.	SEV.	SEV.	MOD.	
HEARING	N	SEV.	N	N	N	
EEG	N.T.	AB.	AB.	N.T.	N	
CYTOGENETIC STUDY	N.T.	MONG.	MONG.	N.T.	N.T.	
SEVERE MEDICAL ILLNESS	*4	--	--	*5	--	
FAMILY PSYCHO- PATHOLOGY	A	A	S	S R	R	

CHART IV: MISCELLANEOUS EVALUATIONS
(LEGEND ON FOLLOWING PAGE)

CHART IV: MISCELLANEOUS EVALUATIONS
(LEGEND)

A - ABSENT
AB. - ABNORMAL
C.B.S. WITH ADJ. RX. - CHRONIC BRAIN SYNDROME WITH ADJUSTMENT REACTION
C.B.S. WITH B. - CHRONIC BRAIN SYNDROME WITH BEHAVIORAL REACTION
C.B.S. WITH P. - CHRONIC BRAIN SYNDROME WITH PSYCHOSIS
M - MILD
MOD. - MODERATE
MONG. - MONGOLOID
N - NORMAL
N.T. - NOT TESTED
R - REACTIVE
S - STRUCTURED
SEV. - SEVERE

- *1. AS MEASURED BY APPLICABLE SCALES: VINELAND, STANFORD-BENET AND
DARTELL INFANT INTELLIGENCE SCALE.
*2. POSSIBLE BIRTH INJURY PRESENT
*3. POSSIBLE TRANSITORY HALLUCINATIONS OR PETIT MAL EPILEPSY PRESENT
SINCE BIRTH
*4. BOWEL OBSTRUCTION AND RECURRENT BOUTS OF PNEUMONIA SINCE BIRTH
*5. SEVERE CARDIAC ABNORMALITY

CONTAINS FURTHER DIAGNOSTIC FINDINGS IN ADDITION TO THE PSYCHIATRIC DIAGNOSIS OF EACH CHILD.

OF THE 75 MONGLOIDS WITHOUT PSYCHIATRIC DISTURBANCE, E.E.G. TRACINGS WERE OBTAINED ON 67 OF THEM. ONLY NINE ABNORMAL TRACINGS WERE ELICITED. THE INCIDENCE OF ABNORMAL TRACINGS IN THE DISTURBED AND THE WELL-ADJUSTED MONGOLS IS 62.5% AND 13.4% RESPECTIVELY.

PERUSAL OF CHART IV REVEALS THAT A HIGH INCIDENCE OF SPEECH AND LANGUAGE RETARDATION WAS ALSO A PROMINENT CLINICAL FINDING. THREE OF THESE CHILDREN DISPLAYED NO SPEECH WHATSOEVER AND FIVE WERE SEVERELY RETARDED ON THOROUGH EVALUATION BY A SPEECH PATHOLOGIST.

THE FAMILY PSYCHOPATHOLOGY NOTED IN THE PARENTS OF THESE ELEVEN CHILDREN REPRESENTED AN INTERESTING GROUP TO STUDY. REFERENCE TO CHART IV REVEALS THAT THE PSYCHIATRIST AND SOCIAL WORKER AGREED THAT NO MAJOR FAMILY PSYCHOPATHOLOGY WAS NOTED IN ~~THE~~^{THREE} OF THESE PARENTAL UNITS; ~~THREE~~^{TWO} OF THEM DISPLAYED REACTIVE PSYCHOPATHOLOGY, AND SIX OF THEM DISPLAYED STRUCTURAL PSYCHOPATHOLOGY. PERHAPS BRIEF CLINICAL VIGNETTES

CAN BEST ILLUSTRATE THESE INTERESTING PARENT-CHILD INTERACTIONAL UNITS.

J.A. (6.5 YEARS) HAD BEEN NOTED TO BE A VERY IRRITABLE YOUNGSTER SINCE 1.5 YEARS OF AGE. HIS SHORT ATTENTION SPAN, HYPERACTIVITY, AND LOW FRUSTRATION THRESHOLD PRESENTED A CHRONICALLY PERPLEXING PROBLEM TO HIS PARENTS WHO HAD MADE REPEATED ATTEMPTS TO MODIFY THEIR SON'S BEHAVIOR VIA DIFFERENT PARENTAL APPROACHES AND PROFESSIONAL CONSULTATION. THE ADMINISTRATION OF AN ANTAGONISTIC AGENT SLOWLY DIMINISHED THE CHILD'S DISORGANIZED PATTERN OF BEHAVIOR AND ALLOWED HIS PARENTS TO MORE EASILY INTERACT WITH HIM IN A POSITIVE FASHION. THUS, THIS YOUNGSTER REPRESENTED AN EXAMPLE OF A CHRONIC BRAIN SYNDROME WITH A BEHAVIORAL REACTION OCCURRING AGAINST THE BACKDROP OF NORMAL FAMILY INTERACTION.

R.S. (3 YEARS) HAD APPARENTLY DISPLAYED ONLY SLOW DEVELOPMENTAL MILESTONES AND MILD BEHAVIORAL PROBLEMS UNTIL THE BIRTH OF ANOTHER SIBLING WHEN HE WAS TWO YEARS OLD. CONCOMITANTLY, THE FAMILY HAD JUST RECENTLY MOVED INTO A NEW HOME. THESE FACTORS APPARENTLY MADE THE BOY

QUITE TENSE, EXTREMELY JEALOUS OF THE NEW ARRIVAL, AND OVERLY DEMANDING WITH FREQUENT TEMPER TANTRUMS WHEN HIS EXCESSIVE DEMANDS WERE NOT IMMEDIATELY FULFILLED. FAMILY COUNSELING EVENTUATED IN A CLEARER RECOGNITION OF THE CHILD'S PERSONALITY NEEDS IN LIGHT OF THE RAPIDLY CHANGED ENVIRONMENTAL NEEDS THAT HE WAS REACTING TO SO ADVERSELY. THIS ILLUSTRATES AN ADJUSTMENT PROBLEM OCCURRING IN THE MIDST OF REACTIVE FAMILY PSYCHOPATHOLOGY.

J.J. (6.5 YEARS) HAD BEEN NOTED TO BE SIGNIFICANTLY RETARDED IN ALL MAJOR AREAS SINCE EARLY IN LIFE. THE PARENTS OF THIS YOUNGSTER TENDED TO INTROJECT THEIR SON'S HANDICAPS AS RELIGIOUS RETRIBUTION FOR THEIR OWN SUPPOSED INADEQUACIES. THE FATHER, IN PARTICULAR, BECAME INCREASINGLY UPSET OVER HIS SON'S LACK OF DEVELOPMENT AND WOULD ALTERNATELY BE ACTIVE AND THEN EXTREMELY PASSIVE IN HIS RELATIONSHIP TO HIS SON. THIS RELATIVELY SYMBIOTIC FATHER-SON RELATIONSHIP CAME TO AN ABRUPT HALT WHEN THE FATHER EXPERIENCED AN ACUTE SCHIZOPHRENIC REACTION AND HAD TO BE HOSPITALIZED. THE DISRUPTION OF THIS RELATIONSHIP

WAS INITIALLY BEWILDERING TO THE CHILD AND HE SLOWLY WITHDREW AND COMMENCED DISPLAYING CATATONIC POSTURING AND AUTISTIC THINKING AND ACTIONS. THUS, THIS YOUNGSTER REPRESENTS A PSYCHOTIC REACTION IN A CHILD WHO HAD BEEN NURTURED ON MAJOR STRUCTURED FAMILY PSYCHOPATHOLOGY.

DISCUSSION

THE INFORMATION PRESENTED ALLOWS ONE TO STATE THAT THE INCIDENCE OF EMOTIONAL PROBLEMS IN A GROUP OF 86 MONGOLOID CHILDREN STUDIED IN DEPTH IS SIGNIFICANT. THIRTEEN PER CENT OF THIS GROUP OF CHILDREN DISPLAYED BEHAVIORAL PROBLEMS THOUGHT SERIOUS ENOUGH TO WARRANT A PSYCHIATRIC DIAGNOSIS. IT CAN BE ARGUED THAT THE INCIDENCE OF PSYCHIATRIC DISORDERS IN THIS GROUP IS DISPROPORTIONATELY HIGH BECAUSE OF THE NATURE OF THE POPULATION, I.E. THE CHILD WAS REFERRED TO THE PROJECT BECAUSE OF HIS BEHAVIORAL PROBLEM BY PARENTS DESIRING TO HAVE THE CHILD INSTITUTIONALIZED. HOWEVER, THIS DOES NOT NEGATE THE CONCLUSION THAT PSYCHIATRIC DISTURBANCES DO OCCUR IN MONGOLOIDS.

A REVIEW OF THE ASSOCIATED CLINICAL FINDINGS IN THESE CHILDREN REVEALED FURTHER POSSIBLE INDICES THAT MAY HAVE CONTRIBUTED TO THEIR

EMOTIONAL DISORDERS IN ADDITION TO, OR IN THE ABSENCE OF THE USUALLY DISCUSSED FAMILY PROBLEMS.

THE HIGH INCIDENCE OF ABNORMAL E.E.G. TRACINGS IN THIS GROUP RAISES THE POSSIBILITY OF POOR CENTRAL NERVOUS SYSTEM INTEGRATION AS A FURTHER HANDICAP TO SMOOTH EMOTIONAL FUNCTIONING FOR THESE CHILDREN. THE FEATURE SHOULD BE MORE THOROUGHLY INVESTIGATED AS TO POSSIBLE INTER-RELATIONSHIPS.

THE BRAIN OF THE MONGOL HAS ALSO BEEN THE SUBJECT OF DISAGREEMENT IN THE LITERATURE. BENDA (3,5) HAS STUDIED THE GROSS AND MICROSCOPIC STRUCTURE OF 80 MONGOLOID BRAINS OF ALL AGES. HE CONTENDS THAT MANY ARCHITECTURAL ABNORMALITIES ARE PRESENT. HE CITES THE MARKEDLY RETARDED MYELINATION AND UNDERSIZED CELLS WITH VACUOLIZATION OR DEGENERATION IN WHITE MATTER IN THE FRONTAL, TEMPORAL AND OCCIPITAL LOBES. GROSSLY THE BRAIN HAS FLATTENED CONVOLUTIONS AND CEREBELLAR AND CEREBRAL ATROPHY OR IMMATUREITY. MANY OTHER MORPHOLOGICAL ABNORMALITIES ARE DESCRIBED. OTHER AUTHORS SUPPORT THIS DESCRIPTION (2,31). THAT THE CHANGES SEEN IN THE BRAIN ARE NONSPECIFIC

AND RELATIVELY MINOR, WITH A DISPARITY IN THE AMOUNT OF PATHOLOGY AND THE SEVERITY OF THE MENTAL DEFICIENCY.

THE LITERATURE IS ALMOST DEVOID OF ANY REFERENCE TO THE E.E.G. IN MONGOLISM. MATTHEWS AND MANNING (19) FOUND THAT A POSITIVE RELATIONSHIP EXISTS BETWEEN THE SEVERITY OF THE E.E.G. ABNORMALITY AND PSYCHOLOGICAL TEST PERFORMANCE FOUND IN 45 MILDLY RETARDED SUBJECTS. HOWEVER NO MENTION IS MADE OF THE E.E.G. IN MONGOLS SPECIFICALLY.

THE FREQUENT SPEECH PROBLEMS, ESPECIALLY THOSE CHILDREN WHO DISPLAYED NO SPEECH, PRESENTS FURTHER FERTILE GROUNDS FOR INTERPERSONAL PROBLEMS. THE INABILITY TO VERBALLY COMMUNICATE ONE'S EMOTIONAL NEEDS MAY WELL PREDISPOSE SOME OF THESE CHILDREN TO PSYCHIATRIC DISORDERS.

THE INCIDENCE OF BEHAVIORAL DISTURBANCES IN MONGOLOIDS CANNOT BE CORRELATED WITH AGE BECAUSE THE PROJECT LIMITED ITS STUDY TO CHILDREN.

THE STUDY SHOWED NO SIGNIFICANT DIFFERENCE IN THE SEX INCIDENCE OF PSYCHIATRIC DISTURBANCES, RELATIVE TO THE SEX INCIDENCE OF THE ENTIRE GROUP OF 86 MONGOLOIDS.

FOUR OF THE ELEVEN MONGOLOIDS WITH BEHAVIORAL PROBLEMS PRESENTED WITH SEVERE MEDICAL ILLNESSES. THIS FACTOR WOULD CONTRIBUTE TO THE CHILD'S INABILITY TO DEVELOP STRONG INTERPERSONAL RELATIONSHIPS WITH PEERS AS WELL AS ADULTS VIA PHYSICAL INCAPACITATION. PARENTAL REJECTION, OR GUILT AND OVERCOMPENSATION, WOULD CERTAINLY BE MORE LIKELY TO BE PRESENT IN THE FACE OF LARGE MEDICAL EXPENSES AS WELL AS A RETARDED CHILD.

SUMMARY

A STUDY WAS MADE OF 26 MONGOLOID CHILDREN, 11 OF WHICH HAD PSYCHIATRIC DISTURBANCES. THE TYPES OF DISTURBANCES ARE DISCUSSED IN LIGHT OF SEVERAL OTHER DIAGNOSTIC ENTITIES THAT WERE ENCOUNTERED IN EVALUATING THESE CHILDREN. THREE CASE HISTORIES TYPICAL OF THE THREE TYPES OF EMOTIONAL DISTURBANCES ENCOUNTERED ARE DISCUSSED AT LENGTH.

THE STIGMATA OF MONGOLISM ARE DISCUSSED AS WELL AS THE CRITERIA FOR WHAT CONSTITUTES A MONGOLOID CHILD, EMPHASIZING THE DIFFICULTY IN DIAGNOSING MONGOLISM.

IT IS INTERESTING TO NOTE THE HIGH PERCENTAGE (62.5%) OF THE 11 EMOTIONALLY DISTURBED MONGOLOID CHILDREN THAT DISPLAYED ABNORMAL ELECTROENCEPHALOGRAMS, ESPECIALLY WHEN THIS FINDING IS CONTRASTED TO THE LOW INCIDENCE (13.4%) OF SUCH ELECTROENCEPHALOGRAPHIC ABNORMALITIES IN THE REMAINING 75 MONGOLOIDS. THIS FINDING LEADS ONE TO SPECULATE WHETHER THIS FINDING OF CEREBRAL DYSRHYTHMIA MAY BE ETIOLOGICALLY SIGNIFICANT IN THE PRODUCTION OF THE EMOTIONAL DISTURBANCES IN THESE CHILDREN. THUS, CENTRAL NERVOUS SYSTEM INSTABILITY MAY BE ONE OF THE FACTORS MAKING THESE 11 CHILDREN MORE VULNERABLE TO THE INTERPERSONAL DISHARMONY WHICH WERE SO CLOSELY ASSOCIATED WITH THE ONSET OF THEIR PSYCHIATRIC DISTURBANCES.

ALTHOUGH THE FREQUENTLY DESCRIBED STEREOTYPE OF THE MONGOLOID CHILD AS THE CHARMING, LOVABLE RETARDATE APPEARS TO BE ACCURATE, HE IS BY NO MEANS IMMUNE TO PSYCHIATRIC DISTURBANCES.

CONCLUSION

OF A GROUP OF 86 MONGOLOID CHILDREN STUDIED BY A MULTI-DISCIPLINE TEAM IN A MEDICAL SETTING, 11 CHILDREN HAD PROMINENT PSYCHIATRIC DISTURBANCE.

THE 11 CHILDREN HAVE BEEN REVIEWED, WITH SPECIFIC REFERENCE TO THE MULTIPLE DETERMINATES THAT MAY HAVE PRODUCED THEIR PARTICULAR PSYCHIATRIC DISTURBANCE.

THIS STUDY UNDERSCORES THE NEED FOR MORE ATTENTION TO THE PSYCHIATRIC ASPECTS OF MONGOLISM-- AN AREA WHICH HAS BEEN BOTH PERPLEXING AND CHALLENGING.

IN CONCLUDING, I WISH TO EXPRESS MY SINCERE GRATITUDE TO MY ADVISOR, DR. FRANK MENCLASCHINO. WITHOUT HIS PATIENCE AND ASSISTANCE, THIS PAPER WOULD NOT HAVE BEEN POSSIBLE.

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