

MUNCHAUSEN SYNDROME BY PROXY: REPORT OF A CASE

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Abstract—Munchausen syndrome by proxy (MSBP) is a common form of child abuse and neglect. A case is reported and briefly reviewed. Acta Medica Iranica 33 (3&4): 110-111; 1995.

Key words: Munchausen syndrome by proxy (MSBP); Munchausen syndrome (MS); child abuse

INTRODUCTION

Munchausen syndrome (MS), named after an 18th century German nobleman, Baron Munchausen (1), is a disorder in which adults injure themselves, or falsify symptoms so as to appear ill (2). Munchausen Syndrome by proxy (MSBP), is when illness is induced and/or fabricated in a child by a parent or caregiver—usually the mother—so as to bring the child to medical personnel (1). The subject was first articulated in 1977 by Medow (3) and was thoroughly reviewed by Rosenberg, and Skau and Mouridsen (4,5). A mother and her son presented below represent typical case of MS and MSBP, respectively.

CASE REPORT

In July 1994, a 4-year-old boy from Neiriz, an area in Fars province, was admitted in our ward because of alternating level of consciousness since 10 days before. Completely well up to that time, he developed excessive somnolence, then complete unresponsiveness to the environmental stimuli, for which he was successively admitted in 2 local hospitals. Because of no improvement, he was transferred to Nemazi Hospital Emergency ward, in Shiraz, and later, to the Pediatric Neurology ward. In the Emergency ward, he was given supportive care and underwent a complete evaluation, including: head computed axial tomography, EEG, routine hematology, serum and cerebrospinal fluid and

arterial blood gases work-ups, all of which were normal. No toxicology screening was available. With supportive care, he regained consciousness for one day, only to lapse into unconsciousness the following day. He was the second child of a 31-year-old housewife and a 61-year-old farmer. Significant past history—according to the mother—included: a bout of generalized seizure at 7 months, inguinal herniorrhaphy at 15 months, dish-washing powder ingestion at 2 years, and an inconsequential fall 1 month ago, leading to a brief hospitalization.

On further questioning of the mother's past history, she admitted to multiple hospitalizations for "brucellosis, tuberculosis, urinary tract infection, cholecystitis, and depression." She admitted to a period of hospitalization in Faghihi Hospital, in Shiraz where she repeatedly injected "Soranj" subcutaneously to prolong her hospital stay. All work-up was negative. She was discharged with impression of Panniculitis. She claimed she and her son were sero-positive for human immunodeficiency virus (HIV), which was later disproved. She carried multiple prescription forms containing several psycho-active drugs. She had a depressed appearance. She was familiar with most common medical terms used in the ward. Despite the hot environment of the ward, she insisted to stay in the hospital. At our ward she and her child were put under close scrutiny of medical personnel and other visiting parents in the room as well as remote control T.V. system. The child regained consciousness in less than 24 hours. The mother and child underwent a tuberculin testing for T. B. The procedure caused a great relief of somatic complaints which the mother had during her child's stay in the ward. Forty-eight hours later the mother was found inserting chlorpromazine tablets in her child's mouth. Upon further restrictions and separation of the child from his mother no further loss of consciousness occurred. This showed that the cause of coma was maternal intentional drug-giving to the child to prolong the hospital course.

Transient liver enlargement was noted during the child's hospital course, with normal function tests and sonography. Safety measures were taken to protect the child from further intoxication, and he was put under the

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father's custody. He did not come back for further follow up. The mother was also referred for psychiatric evaluation, which she refused.

DISCUSSION

A brief survey of literature reveals that MSBP may present in almost any clinical manifestation (Table 1), confusing the medical personnel caring for the ill infant or child (2). The syndrome is characterized by infliction or falsification of an illness in an infant or a child so as to present him/her for medical evaluation and prolonged, often frequent, hospitalizations. Also, the unnecessary para-clinical evaluations, which end up in death or handicaps for the child and separation and sometimes imprisonment of the caregiver (4). Psycho-social problems of the parent and his/her need to stay away from home (as probably in this case) and the need to make bonds with medical personnel in compensation for abandonment in the childhood (6), may partially explain this form of child abuse.

Awareness of the physician, close monitoring of the child and the parent while at hospital (7), and measures to prevent further abuse are the main management steps (4).

Table 1. Examples of medical conditions seen in MSBP.

1	Falsification of lab results by adding blood to urine or feces or changing the lab results (2,8).
2	Frequent drawing of blood from the child by parents to make him appear anemic (2).
3	Inflicting hematoma and bleeding in a child with bleeding disorder; unexplained hematuria/ menorrhagia (9)/ albuminuria (10).
4	Seizures, recurrent apnea, cyanosis, and sudden infant death syndromes (SIDS) (2,9,11), diarrhea, malnutrition (12).
5	Intoxication with salt (13), rodenticide (14), LSD (15), ipecac syrup (16).
6	Induction of pre-term delivery
7	Hearing impairment, suffocation, otitis, polymicrobial bactremia, fever, GI perforation (4).

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ABSTRACTS FROM VOLUME 33
(Numbers 1&2)

DEEP MEDIAN STERNAL WOUND INFECTION: MANAGEMENT AND RECONSTRUCTION.

Hamid-Reza Davari, MD and Mohammad-Bagher Rahim, MD

Abstract—During a 30-month period, 25 patients with deep infected median sternotomy wounds were managed surgically. Fifteen patients had chronic sternal osteomyelitis with associated costochondritis, 7 patients had only costochondritis, and 3 patients had dehiscence and/or mediastinitis. Twenty were male and 5 were female. Their ages ranged from 11 to 71 years. Nine patients had 11 failed previous attempts by other physicians. Debridement of bone or sternectomy with removal of infected cartilage and soft tissue following primary reconstruction was carried out. A total of 35 operations were done. Twenty-one patients were successfully treated in one session, however, in 4 patients with recurrent infection, a total of 10 additional operations were done. Inadequate debridement was the most common cause of recurrence. Recurrent infections were managed with another muscle or omental flap, in addition to debridement or resection. We conclude that muscle transposition after adequate debridement or resection is an excellent method for deep and chronic sternal wound infections. *Acta Medica Iranica 33 (1&2): 1-11; 1995*

Key words: mediastinitis; median sternal wound infection; sternal osteomyelitis; costochondritis

AUTORADIOGRAPHIC STUDY OF CORNEAL NEOVASCULARIZATION INDUCED BY ALKALINE BURN. *Ali Ghadiri, MD and Yin Shuguo, MD*

Abstract—Corneal neovascularization (CNV) can cause significant visual loss. The kinetics of endothelial cells during microvascular growth were studied using a model of alkaline cauterization-induced neovascularization of the 40 rabbits cornea. Changes in DNA synthetic activity of endothelial cells during neovascularization were assessed by autoradiographic study of ³H-TdR incorporation, *In vivo* and *In vitro*. Microscopic study demonstrated that migration and redistribution of existing endothelial cells from the limbal vessels enabled vascular sprouting and elongation with cellular proliferation. *Acta Medica Iranica 33 (1&2): 12-17; 1995*

Key words: corneal neovascularization; endothelial cells; ³H-TdR

DIAGNOSTIC RELEVANCE OF AgNOR IN OVARIAN SEROUS BORDERLINE TUMORS. *Ali Zare' Mehrjardi, MD and Fereshteh Ensani, MD*

Abstract—Nucleolar organizer regions are loops of nuclear DNA related to ribosomal DNA, and their number in cells is believed to indicate cellular proliferative activity. Using a silver staining

method to visualize these structures in paraffin embedded tissue sections, an attempt was made to determine if these AgNOR counts could be used as a diagnostic tool for serous borderline and malignant serous ovarian tumors were selected and the mean number of AgNOR was determined in all cases. A progressive increase in mean AgNOR values was noted from the benign group towards the borderline group and further to the carcinoma group; the differences between the means in each group were statistically significant. However, there was a high degree of overlap between the values of the borderline and malignant groups. These results indicate that AgNOR counts may not be very useful as a diagnostic tool in an individual case. *Acta Medica Iranica 33 (1&2): 18-21; 1995*

Key words: ovarian tumor; nucleolar organizer regions; ovarian serous tumors; borderline tumors

REVIEW OF 103 CASES OF MINOR SALIVARY GLAND TUMORS. *Yousef Valizadeh, MD and Mohammad Ali Mohagheghi, MD*

Abstract—From 1972 to 1992, 518 cases of salivary gland tumors (major and minor) were registered in the Department of Surgical Pathology of Cancer Institute. Of these, 103 cases were minor tumors (56 female and 44 male). Three cases were excluded from the study because of the controversy regarding their diagnoses. The most common pathology was mixed tumor (69%) (benign pleomorphic adenoma) and the remaining 31%, were malignant. There were 20% adenoid cystic carcinoma and 7% mucoepidermoid carcinoma, with only 3% (or 3 cases) malignant mixed tumor, and finally 1% observed as acinic cell adenocarcinoma. The most common anatomic sites of these tumors were the hard and soft palate of 36% and 17%, respectively. *Acta Medica Iranica 33 (1&2): 22-26; 1995*

Key words: minor salivary gland; mixed tumor; mucoepidermoid carcinoma

BRUCELLA ENDOCARDITIS IN IRANIAN PATIENTS: COMBINED MEDICAL AND SURGICAL TREATMENT. *Abraham Nematipour, MD and Gity Samar, MD*

Abstract—Brucella endocarditis is a rare but serious complication of brucellosis and is the main cause of death related to this disease. It is not rare in the endemic areas and actually accounts for up to 8-10% of endocarditis infections. We report seven adult cases of brucella endocarditis in Imam-Khomeini Hospital. Contrary to previous independent reports, female patients were not rare in this study and accounted for three out of seven. Four patients were cared for by combined medical and surgical treatment and were recovered. Three of the patients that did not receive the combined therapy could not be saved. This report confirms the necessity of prompt combined medical and surgical treatment of brucella endocarditis. *Acta Medica Iranica 33 (1&2): 27-30; 1995*

Key words: brucella endocarditis; brucellosis; infectious endocarditis

HYDATID CYST PRESENTING AS A THYROID NODULE: REPORT OF THREE CASES. *Mohammad Hassan Bastanagh, MD, Vahab Fatourechi, MD, and Reza Rajabian, MD*

Abstract—Hydatid cyst of the thyroid gland is rare, even in areas where echinococcosis is endemic. We report two cases of hydatid cyst of the thyroid gland and one case of a hydatid cyst in the soft tissues of the neck. In the latter, the cyst was superimposed on the thyroid gland and presented as a thyroid nodule. In one patient, fine needle aspiration biopsy produced severe anaphylaxis. In view of the rare occurrence of hydatid disease of the thyroid gland, fine needle aspiration biopsy of thyroid nodules can be performed routinely in areas endemic for echinococcosis but should be avoided if hydatid disease is strongly suspected. *Acta Medica Iranica* 33 (1&2): 31-34; 1995
Key words: hydatid disease; fine needle aspiration biopsy; thyroid nodule; anaphylaxis

PHAKOMATOSIS PIGMENTOVASCULARIS: REPORT OF A CASE. *Mostafa Mirshams Shahshahani, MD, Zahra Safaii-Naraghi, MD, and Mohammad Reza Mortazavi, MD*

Abstract—The present study introduces a rare case of phakomatosis pigmentovascularis, which is characterized by the existence of pigmentary naevus and vascular naevus. Until 1985, 63 cases of this syndrome have been reported, mostly in Japan (56 cases). This is the first case of phakomatosis pigmentovascularis, reported in Iran. *Acta Medica Iranica* 33 (1&2): 35-38; 1995

Key words: phakomatosis pigmentovascularis; portwine stain (naevus flammeus); Mongolian spot; naevus spilus; naevus anaemicus

HYPERTENSION IN PREGNANCY. DO THESE PATIENTS REQUIRE PREFERENTIAL TREATMENT? A STUDY CONDUCTED ON 8,743 ADMISSIONS IN UNIVERSITY HOSPITALS. *Firouzeh Akbari Asbagh, MD and Zahid Hussain Khan, MD*

Abstract—This study was conducted on 8,743 pregnant women, who reported to the labour units of University Hospitals from January 1993 till January 1995. Out of this influx of pregnant women, only 762 had pregnancy induced hypertension (PIH), an incidence approximating 8.71%. Mild and moderate cases of preeclampsia formed 78.35% and severe preeclampsia was only 21.65% of the entire and established cases of PIH. We had only one maternal mortality and one case of convulsive episode. Five patients had to undergo predate Caesarian section (CS). Most of our patients fell within the age range of 20-25 years. The findings accumulated from this study is presented with an accepted protocol of anesthetic management. The study was aimed at providing statistical analysis of these high risks

obstetric cases. An attempt was made to find and explore a logical panacea, which would possibly allay the anxieties and apprehensions of the obstetricians and anesthesiologists catering for these patients with their complicated and erratic pathophysiology. *Acta Medica Iranica* 33 (1&2): 39-42; 1995
Key words: preeclampsia; eclampsia; preoperative care; anesthesia.

RADIATION-INDUCED SARCOMA OF CHEST WALL FOLLOWING BREAST CANCER THERAPY. *Yousef Valizadeh, MD and Hooshang Mohammadi, PhD*

Abstract—A woman patient who had received external radiotherapy for breast cancer developed secondary tumor in the irradiated area after nine years. We offer our observation on this case which seems to be radiation-induced sarcoma. *Acta Medica Iranica* 33 (1&2): 43-46; 1995

Key words: breast cancer; radiotherapy; sarcoma

CREUTZFELDT-JACOB DISEASE: FIRST BIOPSY PROVEN CASE IN IRAN. *Hossein Kalanie, MD*

Abstract—A biopsy diagnosed patient with Creutzfeldt-Jacob disease is reported in Iran. This 53-year-old hunter presented in May 1994 to Mehr Hospital with typical clinical manifestations of Creutzfeldt-Jacob disease and died 4 months later. Brain biopsy revealed severe neuronal loss, spongiosis and gliosis of cerebral cortex. Exposure of this hunter to the brain tissue of animals may explain the route of transmission of the disorder. *Acta Medica Iranica* 33 (1&2): 47-51; 1995

Key words: Creutzfeldt-Jacob disease; Prion disease; Iran; occupational transmission

EARLY (SUPERFICIAL) ESOPHAGEAL CARCINOMA AND REPORT OF TWO CASES. *Farokh Tirgari, MD and Siamak Grammayeh, MD*

Abstract—Early esophageal carcinoma defined as carcinoma with invasion limited to the mucosa or submucosa, is being increasingly recognized. Timely diagnosis of this early form of esophageal neoplasia provides the opportunity for curative resection. We found 2 cases of this entity among 533 cases of esophageal squamous cell carcinomas resected between 1989 and 1993 in the Cancer Institute of Tehran University of Medical Sciences. *Acta Medica Iranica* 33 (1&2): 52-54; 1995
Key words: Esophagus, squamous cell carcinoma

THE BENEFITS OF IVP AND BARIUM ENEMA IN PATIENTS UNDERGOING HYSTERECTOMY FOR BENIGN CONDITIONS. *Heshmatollah Azhar, MD*

Abstract—A review of 500 cases was undertaken in order to identify which patients undergoing hysterectomy for benign disease were subjected to preoperative intravenous pyelogram (IVP) and / or barium enema (BE), and what abnormalities could be anticipated by these procedures as a surgical screen. Over 80% of the cases reviewed underwent trans-abdominal hysterectomy, and the remainder had vaginal hysterectomy. Close to one-third of the patients were admitted with the diagnosis of fibroid, and one-sixth with uterine prolapse. Miscellaneous benign conditions included adnexal masses, ovarian cysts, and dysfunctional uterine bleeding. Twenty-two patients (4.4%) had IVP preoperatively, while eight patients (1.6%) were given both IVP and barium enema prior to hysterectomy. Over three-fourth of the 22 patients revealed normal IVP, while one-half who had received both IVP and / or BE had an unremarkable roentgenogram interpretation. None of the subjects who had unusual findings in either group were of clinical significance on the pathology report. Post-operative course for the patients was also quite unremarkable. This review indicates that when benign disease is clear-cut and hysterectomy is indicated there is no need for IVP and barium enema. *Acta Medica Iranica* 33 (1&2): 55-57; 1995
Key words: hysterectomy; IVP; barium enema

COMPLICATION OF CATHETER KNOTTING, FOLLOWING RIGHT CEPHALIC VEIN CANNULATION. *Zahid Hussain Khan, MD and Seyed Ali Fakhr Tabatabaie, MD*

Abstract—A right cephalic vein cannulation was performed in a patient scheduled for elective craniectomy in order to keep a constant record of the intra-operative fluid volume. The flow of the fluid through catheter was sluggish. The catheter was cautiously and gingerly with drawn after an x-ray report confirmed knotting at the distal end. We believe that a chest radiograph is mandatory to rule out catheter knotting if an impediment is anticipated in the flow. *Acta Medica Iranica* 33 (1&2): 58-60; 1995
Key words: cephalic vein; knotting; ultrasonic guide

FAMILIAL PAROXYSMAL KINESIGENIC CHOREOATHETOSIS. *Mohammad Rafie, MD*

Abstract—A 14-year old boy was presented with a rare form of movement-induced drop attacks, which was also present in his father. This case was, therefore, labeled as familial paroxysmal kinesigenic choreoathetosis. *Acta Medica Iranica* 33 (1&2): 61-62; 1995
Key words: movement disorders; choreoathetosis; drop attacks

ABSTRACT FROM VOLUME 32
(NUMBERS 3&4)

TREATMENT OF PAROXYSMAL NOCTURNAL

HEMOGLOBINURIA: A THERAPEUTIC TRIAL. *Manoochehr Keyhani, MD, Mohammad Parviz Mirhadi, MD, Bahman Shafaiean, MD, and Nahid Assadi, MD*

Abstract—The beneficial effects of danazol in the treatment of paroxysmal nocturnal hemoglobinuria were evaluated in 34 male patients, 18 to 55 years old. After an initial pre-study participation, a complete blood count (CBC), bone marrow evaluation, sugar water test, ham test, and urine hemosiderin test were carried out. All participants received 600 mg of danazol daily. This dosage was decreased over the 9 month trial period to 400 mg and then to 200 mg. CBC, platelet count, urinalysis and liver profile were evaluated for each patient on a monthly basis. Of the 34 participants, 3 withdrew from the study and 12 did not respond to treatment with danazol. Of the remaining 19 participants, all responded well to the treatment with danazole. The participants' platelet count, white blood count (WBC) and hematocrit were all increased but hemoglobinuria was decreased. At the end of the 9 month study period, when treatment with danazol ceased, all of the 19 participants became anemic again. During treatment with danazol, all of the participants experienced fullness as a side effect from the study group and the overall treatment with danazol was felt to give satisfactory results. *Acta Medica Iranica* 32 (3&4): 83-89; 1994
Key words: danazol; paroxysmal nocturnal hemoglobinuria; transplantation; anemia

PHYSICAL AND NEUROLOGICAL ABNORMALITIES DUE TO IODINE DEFICIENCY IN KEEGA, NEAR TEHRAN. *Hossein Kalanie, MD, Fereydoon Azizi, MD, and Saeed A Ghazi, MD*

Abstract—In this study, we have explored the possibility of subtle neurological abnormalities in presumed normal school children living in an area of hyperendemic goiter. The 48 girls and 43 boys examined were aged 7 to 15 years and resided in keega, a village 35 km north-west of Tehran. Visible goiter was present in more than 90%. Seventy percent of the girls and 54% of the boys fell below the third percentile for height. Head circumference was below the second percentile in 22% of boys and 10% of girls. Primitive reflexes were common (glabellar sign was present in 49%, bilateral sucking in 65%, a snout reflex in 16% and bilateral palmomental reflexes in 14%). Evidence of pyramidal dysfunction was present in 48% of children. Serum thyroxin (T_4) concentration was below $5.0\mu\text{g/dl}$ in 53 (48%) of the subjects. Serum thyroid stimulating hormone (TSH) concentration was below 10 mU/ml in 40% between 10 and 30 mU/ml in 28%, and more than $30\mu\text{U/ml}$ in 32% of the subjects. The presence of pyramidal signs, primitive reflexes and intelligence quotient (IQ) scoring did not correlate with TSH levels. This study indicates that there is significant physical and neurological dysfunction in apparently normal school children, living in an iodine deficient area near Tehran. The frequency of abnormalities in both euthyroid and hypothyroid subjects may indicate that neuronal damage had been imposed during intrauterine and early postnatal life. *Acta Medica Iranica* 32 (3&4): 90-100; 1994

Key words: iodine; child health; neurology; myelination; Tehran

LAPAROSCOPY IN UROLOGY. *MJ Coptocoat, ChM and Gholamreza Pourmand, MD*

Abstract—Operative laparoscopy is transforming urology parallel to the same changes that are occurring in general surgery. This revolution is occurring at a rapid speed and new techniques are being described almost monthly in various journals worldwide. Operative laparoscopy as a form of keyhole surgery bears all the trademarks of minimally invasive therapy that we are striving for. The newly described techniques of laparoscopic varicocelelectomy, herniorrhaphy, pelvic lymphadenectomy, ureteric surgery, nephrectomy, colposuspension, and possible future clinical applications of laparoscopy in urology, including the contribution of organ entrapment and tissue morcellation devices are discussed in this paper. *Acta Medica Iranica* 32 (3&4): 101-109; 1994

Key words: laparoscopy; urology; tissue morcellation

THE YELLOW NAIL SYNDROME-RELATION TO STREPTOMYCIN? *Kazem Amoli, MD*

Abstract—A case of yellow nail syndrome in a female patient, 40 years old, is presented in whom yellow nails developed with characteristic dystrophy, chronologically following daily infections of streptomycin that had been prescribed for an episode of pulmonary infection. Although no definite document could establish the relationship, the clinical sequence was outstanding. Association of this syndrome with other conditions published in numerous reports, of single or a few cases, is not explained, although a wide variety of diseases are mentioned. Further studies concerning this rare but interesting entity is warranted. A recent review of the literature is presented. *Acta Medica Iranica* 32 (3&4): 110-115; 1994

Key words: yellow nails; streptomycin

APOMORPHINE-INDUCED ALPHA1 ADRENOCEPTORS MEDIATED CONTRACTIONS AND OSCILLATIONS IN RAT ANOCOCCYGEUS MUSCLE. *M. Samini, PhD, A. R. Dehpour, PhD, and M. Sayyah, PharmD*

Abstract—We have studied the effect of apomorphine (APO) on rat anocoocygeus muscle (RAM). The response to APO was very prolonged and gave rise to large oscillations in tone. Prazosin antagonized the response to APO and noradrenaline (NA), but D₁ and D₂ antagonists, SKF-83566 and sulpiride, did not. The pA₂ values for prazosin against APO and NA were 9.36 and 6.42, respectively. APO-induced oscillations were not blocked by tetrodotoxin (TTX), sulpiride and SKF-83566, but were sensitive to Mg⁺⁺, verapamil and phentolamine, suggesting that they are myogenic in origin, Ca⁺⁺ dependent and alpha-adrenoceptors mediated. In reserpine and 6-hydroxydopamine pretreated rats the threshold for APO was reduced, that is, the

tissue was more sensitive to APO and APO was acting directly and postjunctionally. The marked differences in the pA₂ values of prazosin against APO and NA suggest heterogeneity of alpha-adrenoceptors. The results indicate that the contractile responses to APO are alpha-adrenoceptors mediated possibly through different subtypes of this receptor and that there is no specific postjunctional DA receptors in the RAM. *Acta Medica Iranica* 32 (3&4): 116-122; 1994

Key words: anocoocygeus muscle; Mg⁺⁺-free medium; alpha-adrenoceptor; myogenic; oscillation; tetrodotoxin

A CASE OF TAKAYASU'S DISEASE INVOLVING ALL MAIN BRANCHES OF THE AORTIC ARCH.

A. Rabbani, MD, A. Kazemi, MD, and M. Davoudi, MD

Abstract—Takayasu's disease commonly involves the aortic arch and its branches. When all main branches are stenotic the surgeon is faced with the challenge of an aorto-carotid or an aorto-bicarotid bypass, possibly along with another bypass procedure. A 49-year-old woman with cerebral, ocular, and upper extremity symptoms, which was due to occluded left carotid, subclavian arteries and a stenotic innominate artery, was subjected to a bypass procedure between the ascending aorta and the right carotid artery. Cerebral, ocular, and right upper extremity symptoms improved following the operation. *Acta Medica Iranica* 32 (3&4): 123-127; 1994

Key words: Takayasu; aortic arch

HISTIOCYTOSIS X INVOLVING THE THYROID IN A PATIENT WITH THALASSEMIA MINOR.

Manoochehr K. Nakhjavani, MD, Amir-Mansoor Sadr, MD, and Mohammad-Hassan Bastanagh, MD

Abstract—A seventeen year old girl presented with primary hypothyroidism, multinodular goiter, amenorrhea and diabetes insipidus. Needle biopsy of the thyroid gland established the diagnosis of histiocytosis x, eosinophilic variant. Endocrine studies showed increased serum TSH and prolactin levels and hypogonadotropic hypogonadism. Hypothalamic and thyroid involvement were suggested. There was no evidence of systemic involvement. *Acta Medica Iranica* 32 (3&4): 128-130; 1994

Key words: histiocytosis; hypothyroidism; Langerhans cell; reticuloendotheliosis; Schuller-Christian disease

FIRST CASE REPORT OF OTOMYCOSIS DUE TO HENDERSONULA TORULOIDEA. *Farideh Zaini, PhD and Shokrollah Elahi, MS*

Abstract—A first case of otomycosis in a 24-year-old male student caused by *Hendersonula toruloidea* is presented. *H. toruloidea* was characterized by thick, branching septate brown-walled hyphae and elongated arthroconidia in microscopic sample mounts in 20% NaOH. Cultures grew out only on cycloheximide-free sabouraud dextrose agar after 4 days at 25°C. In

vitro, the *H. toruloidea* isolate was identified by cultural morphology and also by copious 1-2 celled dark-brown arthroconidia deriving from the fragmentation of aerial hyphae in slide culture's microscopic examination. *Acta Medica Iranica* 32 (3&4): 131-135; 1994

Key words: *Hendersonula toruloidea*; otomycosis; Iran

CATECHOLAMINERGIC LESIONS IN MEDIAL PREFRONTAL CORTEX INCREASE RUNNING-WHEEL ACTIVITY IN THE RAT.

Shahram Lotfipour, Carol H. Woodworth, PhD, and Robert G. Robinson, MD

Abstract—Frontal cortical dopamine (DA) systems may play an inhibitory role in motor behavior, possibly mediated through the nucleus accumbens (NAc). Bilateral lesions of DA terminals in medial prefrontal cortex (MPFC) and bilateral electrolytic lesions in NAc both induce hyperactivity in rats. However, unilateral NAc lesions elicit hyperactivity only from the right hemisphere. The purpose of the present experiment was to determine whether unilateral lesions of catecholamin (CA) terminals in MPFC elicit an asymmetrical increase in locomotor activity, and whether this effect is dependent on norepinephrine (NE) or DA terminals. Male Sprague-Dawley rats were housed in running-wheel cages for 21 days before and 30 days after receiving intracortical injections of the CA neurotoxin 6-hydroxydopamine (6-OHDA), either with or without pre-treatment with desmethylimipramine (DMI), a noradrenergic uptake blocker (n=7 and 5 pair, respectively). Rats were paired according to baseline activity and alternate members of each pair lesioned in either the left or right MPFC. Lesioned animals not pretreated with DMI were significantly more active than pretreated rats, indicating that NE terminals were relatively more

important than DA terminals in determining the effect. A tendency for non-pretreated animals with right-sided lesions to show greater hyperactivity than those with left-sided lesions suggested that the effect was lateralized. The finding that DMI-pretreated rats were no more active following neurotoxin injections than vehicle injections supported the conclusion that hyperactivity following MPFC lesions was not primarily due to focal destruction of mesolimbic DA terminals. *Acta Medica Iranica* 32 (3&4): 136-142; 1994

Key words: medial prefrontal cortex; norepinephrine terminal; emotional laterality

BONE MARROW TRANSPLANTATION IN 38 PATIENTS IN TRAN.

Mohammad Jahani, MD, Ardeshir Ghavamzadeh, MD, and Eissa Baybordi, MD

Abstract—Bone marrow transplantation has been evolved enormously as a curative therapy during the last 25 years. From March 1991 to December 1992, twenty patients with mean age of 13 years were allotransplanted from HLA matched donors. One syngeneic allo-transplantation for severe aplastic anemia was undertaken. During the same period, seventeen autologous bone marrow transplantations comprising 5 AML, 7 ALL, 3 NHL, 1 multiple myeloma, and 1 Ewing's sarcoma were carried out in Shariati BMT center. All 20 allografted patients had successful engraftment. Surviving patients were followed up for 12 months on the average. We conclude that allogeneic BMT is a very effective therapy for AML, ALL and CML, and is the choice for major thalassemia and severe aplastic anemia. However, autologous BMT, to date, has not proved as an effective therapy. *Acta Medica Iranica* 32 (3&4): 143-146; 1994

Key words: allogeneic and autologous bone marrow transplant