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TEEN OUTREACH PROGRAM: AN EXPERIENCE IN SOCIAL PSYCHIATRY. *AD Faheem, MD, KS Zahir, BS,* Department of Psychiatry, West Virginia University Medical School, Morgantown, WV.

This program was initiated to improve the teenagers' awareness of the emotional turmoil of their peers and to enable them to help a peer in crisis. Teen and adult volunteers from the community were enrolled after being screened and trained. The organization consisted of mostly teenagers with some adults on the board of directors. Active involvement of the community was facilitated by the media and civic organizations. Analysis of 427 calls received during the period of one year showed that family concerns, relationship problems between boyfriend and girlfriend, sexual curiosities, and physical concerns account for 35.5%, 26.5%, 2.6%, and 3% of the calls, respectively. Of these calls, 80% dealt mostly with social issues and 20% dealt with suicide or crisis issues. These results were compared with those from a similar project in Boston. We concluded that the program has been successful in highlighting the social aspects of the teen problems in this suburban community of 33,000, mostly coal miners, in southern West Virginia, with a poor economy and high unemployment rate. Unlike previously studied hot line calls i.e., adolescent suicide, this program has helped in focusing on the social and psychological needs of the teenagers.

6

CIGARETTE SMOKING: A SLOW SUICIDE AND HOMICIDE. *MR Rafeeq, MD,* Department of Medicine, St. Charles Hospital, Toledo, OH.

Cigarette smoking is the single most preventable cause of ill-health in the world. Active cigarette smoking is responsible for 400,000 deaths annually in the United States. Environmental cigarette smoke, once considered mainly a nuisance, is now proven to cause harmful effects on nonsmokers. Passive smoking now stands as the third leading preventable cause of death in America, killing 53,000 nonsmokers each year. Second-hand smoke has an especially bad effect on infants, children and individuals with respiratory conditions such as asthma.

Today, when it is established beyond any doubt that cigarette smoking is injurious to one's health, it can be considered forbidden according to Islamic criteria.

The importance of no smoking as the normal behavior is to be emphasized in Muslim gatherings to help promote smoke-free families in our communities and to improve the health of future Muslim generations.

7

EXTENSIVE LYTIC VERTEBRAL LESIONS IN A YOUNG BLACK MALE: AN UNUSUAL MANIFESTATION OF SARCOIDOSIS. *AO Soubani, MD,* Medical Resident, Nassau County Medical Center, East Meadow, NY.

A 29 year old black male was admitted on 7/13/89 with back pain, generalized lymphodenopathy, fever and weight loss. Plain film of the spine showed diffuse osteolytic lesions. Open bone biopsy revealed numerous non-caseating granulomas consistent with sarcoidosis. He was started on 60 mg Prednisone daily, with partial improvement of symptoms after three months.

Sarcoidosis, a multisystem granulomatous disorder with variable world-wide incidence, is eight times more common in blacks than in whites, with slight female predominance. Reported annual incidence in the United States is 1:10,000, Irish women 20:10,000, and Sweden 6.4:10,000. The disease is very rare in Southeast Asia, Africa, and South America. Sarcoidosis commonly involves the lungs, skin, eyes, and liver. Skeletal involvement ranges from 1-13%, usually of hands and feet. Vertebral sarcoidosis is rare and to date 19 cases have been described in English literature. Although vertebral sarcoidosis is usually symptomatic, neurologic complications are infrequent. The radiographic picture is usually that of sclerotic lesions, however, other patterns have been described. It is important to note that the radiologic appearance is not specific for vertebral sarcoidosis and other diagnoses such as tuberculosis, fungal infection, Hodgkins disease, metasteses and multiple myeloma must be ruled out. We present this case for the rarity, extensive involvement of purely lytic lesions of the spine, and the use of MRI in the diagnosis and follow-up of vertebral involvement.

8

GINGER IMPROVES NATURAL KILLER CELL ACTIVITY. *A El-Manshawi, MD, PhD, A Elkadi, MD, O Kandil,* Institute of Islamic Medicine for Education and Research, Panama City, FL.

The present study examined the effect of ginger on the cytotoxic activity of the natural killer cells in apparently healthy human volunteers. Eight subjects were studied with natural killer cell activity, less than 40% of the normal predicted value of our lab. The natural killer cell activity of all subjects examined immediately prior to the trial and after one month of taking a daily dose of two grams of dried ginger powder filled in unmarked capsules. The mean value of natural killer cell activity prior to ginger administration was 21.7 ± 13.6% of the predicted normal. At the end of one month of treatment, the mean value of natural killer cell activity increased significantly to 61.6 ± 33.4% of the predicted normal (P 0.0001). Seven subjects had shown significant improvement. No side effects were reported. The results suggest that ginger, as a natural herb, is an immune enhancer.

9

BALLOON MANOMETRY OF THE RECTUM: AN OBJECTIVE ASSESSMENT FOR PATIENTS WITH IRRITABLE BOWEL SYNDROME (IBS). *MA Quddus, MD, CM Habibullah, MD, SI Hassan, MD,* Department of Gastroenterology, Osmania General Hospital, Hyderabad, A.P., India.

Irritable Bowel Syndrome (IBS) is a diagnosis of exclusion. There is a need for an objective method for diagnosis and follow-up of these cases. Balloon manometry is one such simple bedside procedure. In the present study, control subjects (N = 10) developed an urge to defecate with a mean air insufflation capacity of 184 ± 5 cc, mean air pressure of 74 ± 5 mm Hg and a mean fluid volume of 148 ± 10 cc.

In the diarrheal type of IBS, the mean air insufflation capacity was 142 ± 10 cc with a mean air pressure of 70 ± 10 mm Hg and a mean fluid volume of 178 ± 5 cc. In contrast, the patients with the constipating type of IBS had a mean air insufflation capacity of 240 ± 10 cc, with mean air pressure of 67 ± 5 mm Hg and a mean fluid volume of 151 ± 5 cc. These values appear distinct from those of non IBS patients.

Balloon manometry appears to be a simple bedside procedure for the assessment of the visco-elastic properties of the rectum.

10

LACTIC ACIDOSIS WITH ADENOCARCINOMA OF THE COLON: A RARE ASSOCIATION. *S Iqbal, MD, L Carmosino, MD, S Sherwin,* Department of Medicine, Nassau County Medical Center, East Meadow, NY.

A 61 year old female from Panama presented with increasing swelling of the lower extremities, right upper quadrant pain and loss of weight. Physical examination revealed grossly icteric sclera, hepatomegaly and edema of the legs. Laboratory findings included leucocytosis with left shift, increased prothrombin time, increased hepatic enzymes and decreased serum bicarbonates. She was found to have adenocarcinoma of the colon with liver metastases. A few days later she developed lactic acidosis with high anion gap. The patient was discharged home but rturned on the sixth day and was found to have deteriorating liver functions and severe lactic acidosis. She died the same evening.

The association of lactic acidosis with neoplasm, particularly hematologic malignancies, is well recognized. Several cases in association with solid tumors have been reported. Only one case of lactic acidosis with gastrointestinal malignancy has been reported in which the acidosis was of a chronic nature. We describe here the second case of this association in a patient with carcinoma of the colon with extensive hepatic metastases who died of lactic acidosis.

17

CUSHING'S SYNDROME RESULTING FROM ECTOPIC CORTICOTROPIN-RELEASING FACTOR PRODUCTION IN A PATIENT WITH SMALL-CELL CARCINOMA. *I Husain, MD,* Medical Resident, Department of Medicine, Nassau County Medical Center, East Meadow, NY.

A 63 year old hypertensive Hispanic male was admitted with new onset diabetes, depression, and deteriorating general condition. He was icteric, mildly febrile and had hepatomegaly and ascites. Laboratory examination revealed metabolic alkalosis, hyperglycemia, and very high serum cortisol - 125 (N: 5-18) and ACTH 524 (N: 0-94). Liver biopsy revealed small-cell carcinoma. Autopsy confirmed small-cell carcinoma of lung with metastasis to liver. In addition, there was diffuse adrenal corticol and pituitary ACTH cell hyperplasia; however, the tumor cells stain was negative for ACTH. Ectopic hormone syndrome of small-cell carcinoma includes syndrome of inappropriate anti-diuretic hormone (SIADH) (10-15%), Cushing Syndrome (3-5%) and neuromuscular manifestations, e.g. Eaton-Lambert Syndrome and peripheral neuropathy (1%). Fifty percent of Cushing Syndrome are associated with carcinoma of the lung, of which small-cell carcinoma represent 60%. Since 1928, more than 300 cases of Cushing Syndrome, secondary to ectopic ACTH hormone production, have been reported. In view of the laboratory and pathological findings in this patient, the most likely cause of the clinical manifestations of alkalosis and diabetes was due to production of ectopic corticotropin-releasing factor. This pathogenic mechanism has rarely been reported (NEJM 285:419, 1971; 311:13, 1984); hence, the need for presenting this unusual manifestation of a common cancer.

18

RESPONSE PATTERN OF DEFICIENT T-LYMPHOCYTE SUBSETS IN PATIENTS UNDERGOING TREATMENT WITH NATURAL IMMUNE ENHANCERS. *A Elkadi, MD, A El-Manshawi, MD, PhD, O Kandil, PhD, M Elmarassy, BS, K Elshawi, BS,* Institute of Islamic Medicine for Education and Research, Panama City, Florida.

In 81 patients with a deficiency of one of the T-Lymphocyte subsets - Helper or Suppressor T-cells - who responded favorably to treatment with natural immune enhancers, 53 (65%) followed a particular pattern of response. This pattern indicates that the deficient cell subset is the slower one to recover and increase compared to the other subset. This results in an initial apparent worsening of the abnormal Helper: Suppressor ratio, although the actual count of the deficient cells may actually be improving at that time. This is subsequently followed by improvement or correction of the Helper: Suppressor ratio, as the deficient cell subset gradually reaches the expected higher level and/or the other originally excessive high subset starts decreasing back towards normal. The clinical benefits, resulting from the recognition and serious pitfalls resulting from the lack of awareness of this response pattern, are discussed.

19

HEREDITARY WARFARIN RESISTANCE - CASE STUDY. *F Diab, MD,* Medical Resident, Department of Medicine, Nassau County Medical Center, East Meadow, NY.

A 27 year old black male with past history of left lower extremity deep venous thrombosis was admitted to Nassau County Medical Center in December 1990 with recurrent thrombophlebitis of the right thigh. During hospitalization, in spite of a warfarin dose of up to 30 mg/day, the patient's prothrombin time (PT) remained suboptimal (range 11.0-13.3). The patient was not receiving any medications or diet which could interfere with anticoagulation.

To confirm patient's compliance and drug kinetics, we obtained the following values: plasma warfarin level 7.8 mg/L (normal range 0.6-2.9 mg/L) and plasma warfarin clearance 2.6 L/d (normal range 2.4-10.7 L/d). The possible mechanisms for this warfarin resistance include: poor compliance, excess vitamin K, increased concentration of prolonged half lives of clotting factors, or decreased affinity of the enzyme vitamin K reductase to warfarin (hereditary form).

Based on the high plasma warfarin level with normal plasma warfarin clearance and review of the literature (O'Reilly et al. New Eng J Med 271:809-815, 1964), the patient's warfarin resistance is best explained by tissue resistance, which is characteristic of the hereditary form of the disease.

Only 4 such families have been reported so far and we plan to study this patient's family to confirm our hypothesis.

20

TESTICULAR ISCHEMIA AND REPERFUSION INJURY: ITS PREVENTION, IMMUNE RESPONSE AND EFFECTS ON CONTRALATERAL TESTES. *S Akhter, MD, S Sridhar, MD, N Katlowitz, MD, Y Lamy, MD, KM Butt, MD, JN Cunningham, MD, GJ Wise, MD,* Departments of Urology and Pathology, Maimonides Medical Center and Coney Island Hospital, Brooklyn, NY.

The effects of heparin, oxypurinol and polyethylene glycol labelled super oxide dismutase (PEG-SOD) were studied in testicular ischemia and reperfusion injury in the Sprague Dawley rat model. Ipsilateral and contralateral testes were studied by light microscopy, two and eight weeks after ischemia and reperfusion injury, respectively, and immune response was studied eight weeks later. Significant histological protective effects were found in all three treatment groups undergoing one hour of ischemia followed by reperfusion of the ipsilateral testes and partial, but significant, protection in the four hour ischemia group treated with oxypurinol. A significant immune response was noticed in untreated (ischemia - no drugs) and treated animals with antibody titres $>$ 1:1024. No histological damage was found in any of the contralateral testes in either the untreated or treated groups. It is concluded that heparin, oxypurinol and PEG-SOD offer significant protection from reperfusion injury in short term ipsilateral testicular ischemia. A significant immune response follows ischemia and reperfusion injury which is not prevented despite histological protection of the ipsilateral testes. Despite a significant immune response, there is no histologic evidence of injury noticed in the contralateral testes.

24

AN INFERTILE COUPLE SEEKING ADVICE REGARDING BIOTECHNICAL PARENTING. *T Mir, MD,* Department of Medicine, Nassau County Medical Center, East Meadow, NY.

JR, a 32-year-old computer engineer, and SR, a 29-year-old medical secretary, have been married for seven years. Failure to conceive after the first two years of marriage prompted the couple to seek medical attention. They were both fully evaluated by an internist, gynecologist, endocrinologist, and fertility expert. A complete evaluation was performed, including medical history, past contraceptive experience, exposure to drugs and agents. A thorough physical examination, directed towards detecting systemic disease and/or reproductive tract disorders, in both partners was negative. Studies directed towards ovulation and its timing, quality of semen, insemination, configuration of the uterus, nature of uterine cavity, and status of oviducts were all negative. A hysterosalpingogram and laparoscopic examination were negative. A diagnosis of idiopathic infertility was made.

After the diagnosis was established and accepted by the couple, the following options were offered to them: surrogate mother, artificial insemination by husband or donor, in-vitro fertilization and intrauterine embryo transfer, gamete intrafallopian transfer, zygote intrafallopian transfer, or adoption. While the technical aspects of all these options are remarkable, how do they reconcile with the religious beliefs? Which of these options would be permissible under the Islamic law? What are the moral limits of medical intervention?

25

RESTORATION OF VISION BY CORNEAL GRAFTING. IN ISLAMIC COUNTRIES IT IS POSSIBLE ONLY IF MUSLIMS ARE WILLING TO DONATE THEIR EYES UPON DEATH. *N Panjwani, PhD, B Ahmad, MD,* Department of Ophthalmology, Tufts-New England Medical Center, Boston, MA and Michigan State University, Lansing, MI.

Two cases of blinding corneal conditions in which the vision was restored by corneal grafting will be presented. Every day, in the USA alone, over 100 people are blinded due to trauma, disease, infection and birth defects. Most of these people can be helped through corneal transplantation. In the USA approximately 55,000 whole eyes and 25,000 corneas are collected each year by the combined efforts of some 100 eye banks. Approximately half of these are used for corneal grafts. The surgery has a greater than 90% success rate. Thus, in this country alone, at least 35,000 individuals are helped each year through corneal transplantation. Due to the apparent benefits of corneal grafts it is important to establish the Islamic views on organ donation. Questionnaires were distributed in five different Islamic centers in the USA to investigate the attitude and awareness of Muslims on the subject of organ donation. Three groups were identified: permitted (30%, N = 53), opposed (16%, N = 28), and undecided (54%, N = 95). It is not clear why the majority of Muslims who participated in the survey were undecided on the question of organ donation, in spite of the fact that the Muslim Religious Council in 1983 had taken a position in favor of organ donation provided that the appropriate precautions are taken. Lack of awareness and interest, along with a poor success rate of educational programs on the subject of organ donation among Muslims, proved to be detrimental in Muslim countries, such as Pakistan, where the major problem associated with corneal transplantation is tissue availability and not access to skilled surgeons or well functioning eye banks. The authors recommend implementation of more aggressive educational programs on the subject of organ donation in various Islamic centers to alleviate the tissue availability problem in countries such as Pakistan.

26

ADVANCED CARDIAC FAILURE IN A 53-YEAR-OLD MALE: A CASE STUDY FOR CARDIAC TRANSPLANTATION. *W Hassan,* Department of Medicine, Nassau County Medical Center, East Meadow, NY.

ER is a 53-year-old married, white male. He suffered his first myocardial infarction in 1979. He underwent triple-vessel coronary artery bypass surgery. However, he suffered several myocardial infarctions during the ensuing years, leading to progression to Grade IV congestive heart failure. In 1989 cardiac catheterization showed severe coronary artery disease, dilated left ventricle, moderate pulmonary hypertension and a left ventricular ejection fraction of less than 20%. The patient showed no response to adequate medical treatment. He was treated with a cardiac transplant at Columbia Presbyterian in July 1990. His postoperative course was complicated by a rejection reaction which was treated with a bolus of steroids. He also required a pacemaker. In March 1991 (nine months after surgery), the patient is leading a comfortable retired family life. He does some volunteer work in a hospital and is quite satisfied with his quality of life. This patient brings into focus the following questions:

1. Do the teachings and tenets of Islam support or oppose cardiac transplantation?
2. Would the decision be altered if the donor's family demanded financial compensation?
3. Would the decision be affected by the ethnic or religious background of the donor?

27

ROLE OF LIFE SUPPORT IN HOPELESSLY ILL, PHYSICALLY HANDICAPPED PATIENTS. *M Khan,* Department of Medicine, Nassau County Medical Center, East Meadow, NY.

JS, a 25-year-old Catholic male, oldest of six siblings, had been institutionalized for 23 years as a result of severe hydrocephalus, resulting in loss of cognitive functions, growth retardation and severe physical deformity. He developed recurrent pneumonia, and in September 1989, was admitted for pneumonia and respiratory failure, which necessitated mechanical ventilation. The patient's mother wanted everything done for her "first born." He stayed on mechanical ventilation for an entire year and finally died. During the year he required total support - ventilatory, nutritional, nursing, etc. The year's hospital bill was more than $235,000.00. Questions brought up by this case are:

1. Did the technology prolong life or postpone death?
2. Did the mother have the moral right to decide for the institution and withdrawal of life support?
3. What role do the physicians have in such a situation?
4. Are there any religious (Islamic) guidelines regarding such contemporary issues?

28

SHOULD ARTIFICIAL FEEDING BE CONTINUED IN CHRONIC "VEGETATIVE" PATIENTS? *M Khan,* Department of Medicine, Nassau County Medical Center, East Meadow, NY.

RW, a 68-year-old Jewish, hypertensive female with a past history of resected breast cancer and cardiac arrhythmias requiring a pacemaker, was admitted with hemiplegia on March 16, 1990. The following day she developed deep coma, and required ventilatory support, antibiotics for pneumonia, and intensive monitoring. On the 10th hospital day, the patient's husband signed a "Do Not Resuscitate" order. However, he insisted that the patient receive all other care - food, antibiotics, nursing support, etc. The family insisted that the patient NOT to be transferred to the Critical Care Unit and no machines be used. Mrs. RW continued in a deep comatose state. She was weaned off the mechanical ventilator. She was able to maintain spontaneous breathing, blood pressure and urine output. She had no cortical brain activity and had characteristic features of Apallic syndrome. She continued in this state, required numerous courses of antibiotics, was on a special care bed and finally, died on 12/31/90 - nine months after hospitalization. This patient raises several questions: 1) Should patients with no cognitive cortical brain functions be treated any differently? 2) Should the anticipated high cost of such care play any role in deciding about patient care? 3) How should we address artificial feeding from a medical and religious viewpoint? This patient's family declined use of "machines" but insisted on continuation of "food" and "antibiotics."

34

THE TONGUE AND HAND REPRESENTATION IN THE CEREBRAL CORTEX: A DIVINE MIRACLE OF CREATION. *MS Megahed, MD,* Department of Neurology, Strong Memorial Hospital, Rochester, NY.

Compared with their relatively small size, the tongue and hands enjoy the largest representation in the motor portion of the human cerebral cortex. This explains the tremendous variety of functions that could be performed by such minute organs ranging from the simplest motor skills to the most complicated conceptual ones. Muslims are asked to fully utilize these precious organs for their own good and for the good of the rest of the human race. Muslims need to reflect on the Qur'anic verse:

"On the day when their tongues, their hands, and their feet will bear witness against them as to their actions." Glorious Qur'an: Chapter 24, verse 24.

35

MANAGED HEALTH CARE - IS THIS THE FUTURE OF MEDICAL PRACTICE? *AH Mohardeen, MD, Chief, Vascular Surgery,* Long Island College Hospital, Brooklyn, NY.

Health care costs have increased at a steady pace of nearly twice the rate of general inflation. The total health care cost for this country is about 600 billion dollars a year or 12% of the Gross National Product. This has been the driving force behind the development of "alternative delivery systems". Employees view health care as a commodity like other goods and services in the market.

Managed care is the terminology used for one type of alternate health care system. By the year 1992, nearly 50% of the population will be enrolled in managed care plans. The early product of managed care came in the form of H.M.O. (Health Maintenance Organization). These started with the staff model (such as Kaisar Permanente or HIP of New York) and later became popular with IPA models giving the patient some freedom in choosing the physician.

H.M.O. programs give a wide range of coverage with reasonable premiums for employers and predictable out-of-pocket expense for employees. Then the patient's freedom of choice became an issue and employees wanted a variety of providers to choose from. P.P.Os (Preferred Provider Organizations) are an alternate plan which permit a discounted price from preferred provider.

Sophisticated consumers then demanded freedom to go "out of the system" when the need arises. To accommodate this, employers have demanded different types of coverages that give more choice to the consumer and allow the consumer to accept more burden of the cost. The new hybrids are called M.C.Ps. (managed choice programs) and point of service programs.

39

DIABETIC RETINOPATHY: CURRENT MANAGEMENT. *FM Koreishi, MD,* Williamsville, NY.

Diabetic Retinopathy is a major cause of new blindness in the United States. The American Academy of Ophthalmology has launched a major educational project, "Diabetes 2000". Its goal is early detection of Diabetic Retinopathy so that preventive measures can be taken via treatment and education. Modern treatment with laser and surgery will be discussed.

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HIP PAIN-PSOAS ABSCESS-DIVERTICULITIS: CLINICAL DILEMMA IN A 59 YEAR OLD FEMALE. *H Bazaraa, T Mir,* Department of Medicine, Nassau County Medical Center, East Meadow, NY.

Whereas primary psoas abscess is a well recognized entity in children and young adults, secondary psoas abscess may be present as a diagnostic and therapeutic dilemma. It may be present as hip-pain mimicking acute septic arthritis of the hip-joint. Secondary psoas abscess complicates various diseases of the retroperitoneum and of the peritoneal cavity, such as appendicitis, inflammatory bowel disease, Crohn's disease, pyelonephritis, tuberculosis of the spine, etc. Because complications of tuberculosis have become rare, intestinal disease is now a recognized cause of secondary psoas abscess.

We present the perplexing case of a 59 year old female, admitted with (L) hip pain, low grade fever and difficulty in flexion at (L) hip joint. Patient was noted to have a peripheral leukocytosis and Bacteroides uniformis bacteremia. Diagnosis of septic arthritis (L) hip was entertained. However, failure to respond to appropriate antibiotics led to further work-up which included a CT Scan and ultrasound of the abdomen and a Hypaque enema. A left psoas abscess communicating with a perforated sigmoid diverticulum was noted. The patient underwent colon resection with colostomy and had an uneventful recovery.

We stress the importance of CT Scan in patients presenting with hip pain and flexion difficulty at hip joint and conclude that laparotomy with colon resection remains treatment of choice.

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CISPLATIN THERAPY AND RESISTANT HYPOMAGNESEMIA. *B Bashey, MD, M Ariola, MD,* Department of Medicine, Nassau County Medical Center, East Meadow, NY.

A 50 year old white male was treated with partial glossectomy for locally advanced squamous cell carcinoma of the tongue in August, 1989. He subsequently received combination chemotherapy of 5FU-cisplatin, for a total dose of 170 mg of cisplatin and 170 mg of 5FU. Several asymptomatic electrolyte abnormalities were noted, the most striking of which was severe resistant hypomagnesemia which continued up to present (May '91) in spite of replacement with both oral, and parenteral magnesium.

Cisplatin is an important, frequently used antineoplastic drug. It has been found useful in the treatment of patients with ovarian, head and neck, bladder, lung and cervical cancers. Short term toxicity of cisplatin is nausea and vomiting which can be alleviated with newer and potent antiemetics. Nephrotoxicity with resulting electorlyte imbalance of hypokalemia, hypomagnesemia and azotemia has been reported. With adequate hydration and avoidance of other nephrotoxic agents, these side effects can be minimized. Renal wasting of magnesium appears to be the mechanism of development of hypomagnesemia.

Our case is unique in that the degree of magnesium and potassium deficiency was striking (Mg 0.6 mEq/L and serum potassium of 1.6 mEq/L). The levels showed the striking feature of fluctuation and seemed unresponsive to massive replacement with magnesium. This renal wasting of Mg has persisted for over one year and we wonder whether this defect is irreversible, necessitating life long replacement with magnesium.

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COMPARISON OF CANCER SERUM INDEX WITH PROSTATE SPECIFIC ANTIGEN AND CIRCULATING IMMUNE COMPLEXES AS A MARKER FOR PROSTATIC CANCER. *R Bhatti, K Mallick, P Ray,* Division of Urology, Cook County Hospital, Chicago, IL.

The ratio of alpha1, acid glycoprotein and pre-albumin, often referred to as Cancer Serum Index (CSI), may be a useful tumor marker in detecting prostate cancer (Pca). We measured CSI in the sera of patients with Pca to determine if there was any difference in the levels of CSI in different stages of the malignancy, and compared this level with the levels of prostate specific antigen (PSA) and circulating immune complexes (CIC). The level of CSI did increase with progression of the disease and the values were significantly higher in stage D vs. stage A (P 0.05). The difference in CSI levels between Pcs vs. benign prostatic hypertrophy and age-matched controls was statistically significant. Similar differences were observed in the level of PSA. However, the level of CIC, even though higher in metastatic disease, was not significantly different in the different stages of Pca. The effect of various therapies on the levels of those markers was also evaluated.

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MULTIPLE CUTANEOUS LIPOMA INDUCED BY OCCUPATIONAL EXPOSURE TO FERTILIZERS, PESTICIDES, SOLVENTS AND MIXED CHEMICALS: A REPORT OF 45 CASES. *M Than, MD,* Department of Comprehensive Medicine, University of South Florida, Tampa, FL.

Five employees working in a storage facility of time-released fertilizer diammonium phosphate and granulated tripe s. phosphate granules, were found to have multiple skin lipomas. This observation led the author to collect cases of multiple lipomas, in different occupational settings. During annual physical examinations and mass screening programs in 18 different occupational settings, forty-five patients with multiple lipomas were identified. These included: 8 electronic assembly workers, 5 fertilizer storage attendants, 3 asbestos workers, 2 hair beauticians, 3 Vietnam veterans, 3 paint manufacturers, and the remaining were in other occupational settings. Adipose tissue specimen-metabolites studies for solvent and organochlorine pesticides, and patients' urine and blood metabolites wer analyzed. The Pathophysiologic reaction to the chemicals and the relation of occupational exposure to the genesis of multiple lipomas will be discussed.

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BACTEREMIC FUSOBACTERIUM NUCLEATUM LIVER ABSCESS. *W Liang, J Cervia, F Khan,* Department of Medicine, Nassau County Medical Center, East Meadow, NY.

Of the 13 recognized species in the genus Fusobacterium, **F. nucleatum** is most commonly isolated in human infections. Present in the normal flora of the mouth, it is an important agent in oral and pleuropulmonary infections. Involvement of this organism in intra-abdominal infection, however, is decidedly rare. We herein report a case of bacteremic **F. nucleatum** liver abscess, the first such report to our knowledge.

A 47 year old, previously healthy, man was admitted with fever and chills for 2 days. Physical examination revealed a temperature of 104.4 °F and an enlarged liver span. Significant laboratory evaluations included a white blood count of 4,000/mm³ (39% neutrophils, 11% bands), an aspartate aminotransferase of 344 U/l and an alanine aminotransferase of 213 U/l. Blood cultures grew **Fusobacterium nucleatum.** An abdominal computerized tomographic scan revealed a 9 cm diameter low density liver mass. A 6 week treatment course of intravenous ceftriaxone and metronidazole resulted in complete resolution of the liver mass, normalization of liver enzymes and clinical recovery.

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EVALUATION OF AMMONIA DETOXIFYING CAPACITY OF ISOLATED HUMAN FETAL HEPATOCYTES. *MA Baig, M Swamy, CM Habibullah,* Department of Gastroenterology, Osmania General Hospital, Hyderabad, India.

Hepatocytes were isolated from freshly aborted fetuses whose gestational ages ranged between 16 and 36 weeks, and were subjected for evaluation of ammonia detoxifying capacity by estimating the urea production. The amount of urea produced was expressed in terms of mg % of protein as well as per million hepatocytes. The capacity of ammonia detoxification of fetal hepatocytes was compared with the hepatocytes isolated from the adult cadaver subjects. Detoxifying capacity of the fetal hepatocytes was found to increase gradually with the gestational age and irrespective of sex.

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GINGER: THE NATURAL TRANQUILIZER - A PRELIMINARY STUDY. *A Elkadi, MD, A El-Manshawi, MD, PhD, L Khorshid, BS.* Institute of Islamic Medicine for Education and Research, Panama City, FL.

This study examined the effect of ginger on abnormal psychological symptoms. Thirty volunteers were randomized into two groups; 20 in Group A, and 10 in group B. Group A received a daily dose of two grams of dried ginger powder filled in unmarked capsules for one month. Group B received a placebo. All volunteers were evaluated for abnormal psychological symptoms, using a Symptom Check List (SCL-90-R), before and after the study. The questionnaire is scored and interpreted in terms of nine primary symptom dimensions and three global indices of distress—Global Severity Index (GSI), Positive Symptom Distress Index (PSDI), and Positive Symptom Total (PST). In the ginger group, the mean GSI improved significantly from 0.64 ± 0.38 to 0.43 ± 0.24 ($P < 0.001$), the mean PSDI improved significantly from 1.68 ± 0.38 to 1.47 ± 0.31 ($P < 0.02$), and the mean PST improved significantly from 32.65 ± 16.01 to 25.05 ± 13.6 ($P < 0.003$). In the placebo group, none of the three global indices showed any significant improvement. These preliminary results suggest that ginger has a natural tranquilizing effect.

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GASTROINTESTINAL BRUCELLOSIS: UNUSUAL MANIFESTATIONS OF A COMMON DISEASE IN AN ENDEMIC AREA IN KUWAIT. *H Ali, MD, DM, AR Lu Lu, MRCP,* Department of Medicine, Al-Jahra Hospital, Kuwait.

We report on three patients with gastrointestinal (GI) brucellosis.

Case 1 - After an acute attack of brucellosis, a 65 year old female developed neurologic complications that included severe visceral autonomic neuropathy leading to chronic colonic pseudo-obstruction.

Case 2 - Three weeks after an incompletely treated acute brucellosis, an 18 year old girl developed ulcerative disease of the ascending colon which was treated as brucellosis with complete recovery.

Case 3 - A 38 year old shepherd developed acute pancreatitis and ulcerations of the descending duodenum shortly after his admission for acute brucellosis. He was treated for brucellosis with complete response.

In endemic areas such as Kuwait, the common manifestations of brucellosis are well known. However, visceral involvement, such as seen in the three case-reports described, are extremely uncommon and represent diagnostic and therapeutic problems. These patients were diagnosed based on culture of Brucella melitensis in patients 1 and 3, and antibodies were present in all three. The role of an empiric therapeutic trial will also be presented.

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THE HIGH INCIDENCE OF STROKE IN INDIA IS NOT DUE TO LUPUS ANTICOAGULANT. *M Moonis, R Saxena, GK Ahuja, M Behari, K Prasad,* Department of Neurology and Hematology, All India Institute of Medical Sciences, New Delhi, India.

Stroke in the young is reported to be 10 times higher in India as compared to the West with a significant (30-50%) proportion of idiopathic cases.

Lupus anticoagulant (LA) is an acquired antiphospholipid immunoglobilin associated with an increased risk of intravascular thrombosis. In recent years, a number of Western reports have found LA to be a risk factor in stroke in the young. Affected patients are young, predominantly female, and have recurrent cerebral and extracerebral thrombosis. The prevalence of LA in the young population in India is unknown. However, in patients with systemic lupus erythematosus, the prevalence is about 5%, roughly equivalent to that reported from the West. The present study was designed to evaluate whether LA is a risk factor in the incidence of stroke in the young Indian population. Forty patients, aged 40 years or less with stroke, were included in the study and subjected to a detailed clinical evaluation, including cardiovascular examination. Hemogram, serum chemistry, chest radiographs, and EKG were done in all cases. In selected cases a 4 vessel angiogram was also done. Following Mueh's criteria, all patients were tested for LA in blood. To increase the sensitivity of identifying LA, additional tests; Kaolin clotting time (KCT) and Russel viper venom time (RVVT) were also done. Risk factors seen in the study were as follows: cardiovascular 26.4%, hypertension 11.8%, hypercholesterolemia 8.8%, family history of stroke 5.5%, alcoholism, diabetes and aortoarteritis less than 3%. Peripartum stroke was seen in 8.8%. Clinical profile and risk factors in 26.7% cases of recurrent stroke did not differ from those with single episodes. LA was negative in all the cases evaluated. The results of this study and its implications will be discussed.

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A CASE REPORT OF CNS HIV INFECTION: DIAGNOSTIC, THERAPEUTIC AND ETHICAL CONSIDERATIONS. *A Soltan, H Aziz,* Department of Medicine, Nassau County Medical Center, East Meadow, NY.

A 48-year-old, high-risk HIV patient was admitted with worsening headache, double vision, and a change in mental status. A head CT revealed a right thalamic lesion with an area of enhancement. A serum toxoplasmosis titer was negative. The patient was treated for presumed CNS toxoplasmosis, but showed no improvement. A repeat CT showed new lesions in the occipital lobe. CNS lymphoma was strongly considered, but confirmation was not obtained as the patient refused brain biopsy. Over the next nine months, the patient deteriorated and died 311 days after admission, with a hospital bill of $265,000.00. Autopsy confirmed multifocal lymphoma of the brain, probably of immunoblastic type and focal necrotizing lesions suggestive of toxoplasmosis.

Since 1981, 10,777 AIDS related deaths have been reported: 1) AIDS is the leading cause of death among young adults; 2) One to two million Americans have been infected with the HIV virus; 3) Approximately 40,000 new cases of AIDS are reported yearly.

This presentation will highlight: 1) unusual manifestations on the initial presentation and unexpected findings on autopsy; 2) the diagnostic and therapeutic dilemma in treating a CNS lesion in AIDS; 3) the difficulty in finding a long-term care facility for patients with AIDS; 4) questions regarding allocation of health care resources: Is it prudent to spend more than $265,000.00 on a patient with an expected survival of less than four months?

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A CASE OF MIXED ESSENTIAL CRYOGLOBULINEMIA - CASE REPORT. *FA Padder, MD, TK Malik, MD,* Department of Medicine, Nassau County Medical Center, East Meadow, NY.

A 40 year old woman presented with 3 weeks history of progressive swelling of the abdomen and feet. Four years earlier she developed erythema nodosum with recurrence 3 years ago and again on present admission. A year ago she developed hepatosplenomegaly and anemia and was diagnosed to have undifferentiated connective tissue disorder and CMV hepatitis. She had received a blood transfusion 10 years ago. On admission she had pallor, peri-orbital and leg edema, elevated purpuric spots on lower extremities and hepatosplenomegaly with ascites. Investigation revealed a hematocrit of 29.5, thrombocytopenia, minimally elevated liver enzymes, hematuria, proteinuria of 4.5 gms/24 hrs hypocomplementenemia, positive Rhumatoid Factor (526) and positive speckled FANA. Anti-DNA, Anti-ENA, ANCA, serology for Hepatitis A, B and Cytomegalovirus were negative but hepatitis C antibody was positive. Serum electrophoresis showed elevated OC-globulin; immunoelectrophoresis was consistent with IgM Kappa. Cryoglobulins were strongly positive. Bone marrow biopsy showed panhyperplasia and multifocal lymphocytosis. Rectal biopsy (to exclude amyloidosis) showed submucosal necrotizing resculitis. Special stains for amyloid were negative. She was started on 80 mg Prednisone daily. A renal biopsy 10 days later showed membranoproliferative glomerulonephritis consistent with mixed cryoglobulinemic. Three weeks later she showed marked regression in her ascites, peripheral edema and proteinuria (to 0.8 gms/24 hrs). The association between cryoglobulinemia and hepatitis C virus is rare.

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BLACK BEANS LOWER ELEVATED BLOOD CHOLESTEROL. *A El-Manshawi, MD, Ph.D, A Elkadi, MD,* Institute of Islamic Medicine for Education and Research, Panama City, FL.

The present study examined the effect of black beans on the level of blood cholesterol. Fourteen volunteers with a blood cholesterol level above 201 mg/dl were randomized into two groups of seven each. Group A received a daily dose of two grams of powdered black beans filled in unmarked capsules for one month; Group B was given a placebo. Blood cholesterol was evaluated before and after the assigned treatment. The mean cholesterol level of Group A was significantly reduced from 268 ± 20.21 mg/dl to 236 ± 17.15 mg/dl (P 0.001). The mean cholesterol level in group B was reduced from 231 ± 11.7 mg/dl to 220 ± 11 mg/dl. The change in the placebo group was not significant (P>0.05). No side effects were reported. The results suggest that black beans could significantly reduced blood cholesterol level. However, the dose and the duration need to be adjusted through further research.

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OBSESSIVE COMPULSIVE DISORDER: ETIOLOGIC FACTORS AND NEW TREATMENT STRATEGIES. *MB Ahmed, MD,* Department of Psychiatry, CPC Oakbend Hospital, Fort Worth, TX.

Obsessive compulsive disorder is a syndrome which is more common than previously recognized. Unfortunately, many patients hide their illness until they become dysfunctional. An individual with this disorder may have obsession, compulsion, or both. Common obsessional thoughts include fear of harm, serious illness or fear of embarrassing acts or forbidden sexual thoughts. Common compulsions include ritual acts of washing, touching or avoiding.

Recent neurobiologic evidence suggests that obsessive compulsive disorder may be caused by a defect in the serotonergic input in higher cortical areas. The "serotonin" hypothesis of obsessive compulsive disorder has been derived from studies of anti-obsessional drugs which work by selective blocking of the neuronal re-up-take of serotonin.

Behavior therapy is of proven benefit in obsessive compulsive disorders and is generally considered as the treatment of first choice. Recently, effective pharmacologic treatment for obsessive compulsive disorders has become available. Clomipramine (Anafranil) appears to be effective. The mechanism of its action and side effects will be discussed. The combination of medication and behavior therapy appears to be the most effective method of treatment.

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CRITICAL LEVEL OF ANTERIOR CHAMBER DEPTH IN ADULT PRIMARY GLAUCOMAS. *IA Mehkri, MS,* Mehkri Clinic, Bangalore, India.

The study consists of an analysis of the anterior chamber depth (ACD), corneal thickness (CT) and Gonioscopy of 52 eyes of normal subjects, and 202 eyes of proven cases of primary narrow and open angle glaucoma, in India. Statistically significant differences of the above parameters exist among the groups studied.

A critical level of ACD has also been established below which acute angle closure attack becomes very probable. Age changes have also been studied and correlated.

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CYTOSINE ARABINOSIDE RESISTANCE IN MYELOID LEUKEMIA. *T Tihan,* Department of Neurosurgery, Beth Israel Center, New York, NY.

In a recent study, we presented two cases of acute myeloid leukemia (FAB M2) who developed secondary resistance after achieving complete remission under 1-b-D-arabinofuranosylcytosine (ara-C) containing standard induction therapy. Relapse occured after 12 and 15 months in the first and the second patients, respectively. Metabolic parameters were determined in blasts obtained by leukapheresis at the time of first diagnosis and relapse. In these two cases, contrary to results obtained from other patients, we have found a pyrimidine nucleotide imbalance that may account for the drug resistance.

In another study group we have analyzed the influence of cell cycle on glutathione related enzymes. An important biological function of glutathione resides in the detoxication reactions mediated by enzymes such as GSH transferase and GSH peroxidase. Determination of a range of antioxidant enzymes (superoxide dismutase, glutathione peroxidase, glutathione-s-transferase) in cell cycle enriched fractions of five human myeloid leukemia cell lines (KG1, K562, U937, ML1 and ML2) yielded results identical to those obtained from random cultures. This shows that neither GSH nor GSH related enzymes are cell cycle regulated. These findings argue against the presumption that cell cycle specific response to anthracycline antibiotics like Adriamycin could be due to the GSH dependent metabolism in myeloid leukemia cells.

In the light of these findings, we suggest that drug resistance could be understood only if the exact mode of biochemical action is known and only if the evaluation is done on an individual basis.

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AL-ZAHRĀWĪ, THE GREAT MUSLIM SURGEON OF SPAIN. *N Ahmed, MD,* Department of Pediatric Surgery, Interfaith Hospital, Brooklyn, NY.

Al-Zahrāwī, the magnificent surgeon of the Middle Ages, had been known by various names, like Albucasis, Bulcasis, Alsarbius, Alzahravuis or Ezaharagui. His full name was 'Abul-Qāsim Khalaf ibn 'Abbās al-Zahrāwī. He was born in the royal city of al-Zahrā, about five miles from Cordova, in 930 A.D. He attended the well known University of Cordova. Cordova, at that time was the magnificent capital of al-Andalus, with a population of about one million, where Muslim culture and science were at their peak.

Al-Zahrāwī was an eminent physician and surgeon of the court of caliph 'Abd-ul-Raḥmān III, who was the eighth Ummayad ruler of Spain at that time. He spent a very productive life in practicing medicine, particularly surgery, and medical writings. He died in 1031 A.D. at the age of eighty-three.

Al-Zahrāwī's work was part of the tremendous wealth of scientific knowledge, which was the basis of culture and learning of the Golden Age of the Islamic State. This was the time when Muslims established a brilliant empire, which was organized, powerful and sophisticated. The capital of this empire in the East was Baghdad, and in the West it was Cordova. It was into this Golden Age of Islamic State that al-Zahrāwī appeared in the western part of the Islamic Empire. He lived during what has been considered the most glorious age of al-Andalus. Besides being a contemporary surgeon, he was a great teacher and prolific writer. He believed and taught basic sciences, like anatomy and physiology, as the basis of good and sound surgery.

Al-Zahrāwī wrote thirty treatises comprising his encyclopedia called "Kitāb al-Tasrīf li-man 'Ajaza 'an al-Ta'līf". (Literal meaning: the book of enabling him to manage who cannot cope with the complications). The implication being that it is a self-contained manual of medical arts in all its branches; the user needs not to refer to any other work.

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REFRACTIVE STATUS, ANTERIOR CHAMBER DEPTH, CORNEAL THICKNESS, AND GLAUCOMA. *S Mehkri, MBBS,* Mehkri Clinic, Bangalore, India.

We reported a study of 206 eyes of Indians proven to be affected by primary narrow or open angle glaucoma in whom the refractive error was studied along with the anterior chamber depth (ACD) and the corneal thickness (CT).

The study confirmed that cases of primary narrow angle glaucoma showed a definite preponderance of hypermetropic errors while cases of primary open angle glaucoma showed a dominance of either ametropia or myopia.

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PRINCIPAL COLOR DUPLEX IMAGING. *N Hassani, MD,* Department of Radiology, Columbia University, New York, NY.

Because of the technological progress in the past few years, the means by which blood vessels are examined has changed.

In this presentation the principal of Doppler frequency shift velocity measurement, positive and negative flow direction, Doppler spectrum display, laminar and disturbed flow will be discussed. The color duplex system will be presented and the latest technological advances will be discussed.

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LONGTERM PROGNOSIS OF SYMPTOMATIC BUNDLE BRANCH BLOCK PATIENTS FITTED WITH PERMANENT PACEMAKERS. *R Ahmed, MD, PhD, R Sutton, FACC,* Westminster Hospital, London, United Kingdom.

Longterm prognosis of patients with symptomatic bundle branch block (BBB) and the role of permanent cardiac pacemakers in symptom control is still controversial. We followed 52 patients; 45 males and 7 females with BBB who received permanent pacemakers for syncope (44), presyncope (7) and shortness of breach (1). The mean follow up period was 47.9 ± 35.6 months (range: 3-162), the mean age was 73 ± 9 years. At presentation, the EKG revealed PQ 228 ± 47 ms, LBB in 19, RBBB in 7, RBBB + LAH in 19 and RBBB + LPH in 7 patients. All but 4 patients had electrophysiological studies before pacemaker implantation which showed a mean AH interval = 117 ± 46 ms, a mean HV interval = 82 ± 25 ms, and a mean Wenckebach point 148 ± 40bpm. During the follow up, two patients had recurrent episodes of syncope. Twelve patients developed complete heart block (CHB group) at 36 ± 24 months from implant, range 2 to 97 months, in whom pre-implant EKG had PQ = 213 ± 35 ms, LBBB 6, RBBB 2, RBBB + LAH 2 and RBBB + LPH 2. CHB group had pre-implant HV interval longer than the 70 ms, mean 97 ± 23 ms, range 75 to 150 ms, which was longer than the mean HV interval (78 ± 24 ms) of the patients who did not develop CHB (non-CHB group). Syncopal episodes at presentation were more in CHB group compared to non-CHB group (7.3 ± 6.8 vs 2.8 ± 2.8 episodes, $p > 0.01$). PQ interval was slightly longer in non-CHB group (232 ± 51 vs 213 ± 35 ms, NS). There was no significant difference in age or Wenckebach point. Even though mean HV interval was longer and mean syncopal episodes were more in CHB group, these factors could not predict the development of CHB because of significant overlap of these values with non-CHB group. It is concluded that the majority of the symptomatic patients with BBB remain symptom free after pacemaker implantation; significant numbers of them develop CHB during longterm follow up, but development of CHB could not be predicted from symptoms, EKG or electrophysiological parameters.

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IMPLANTATION ATRIAL ELECTROCARDIOGRAMS DO NOT PREDICT ATRIAL FLUTTER/FIBRILLATION IN SICK SINUS SYNDROME PATIENTS. *R Ahmed, MD, PhD, R Sutton, FACC,* Westminster Hospital, London, United Kingdom.

Atrial flutter/fibrillation (AF) develops in a significant number of patients with Sick Sinus Syndrome (SSS) in the natural course of the disease. It has been suggested that the amplitude of the atrial electrocardiogram (AEGM) can be used as a predictor of future development of AF in SSS. Atrial fibrosis is common in SSS and also occurs as part of the natural aging process. It has also been suggested tht the amplitude of AEGM may become smaller with advancing age. To answer these questions we studied 235 patients with SSS who had dual chamber pacemaker implanted between 1985 and 1988 and compared these with 39 patients with complete heart block (CHB) without any evidence of SSS. The patients had atrial and ventricular electrocardiogram (AEGM & VEGM) and P & R wave SLEW rates determined at pacemaker implantation and they were followed up at 6 monthly intervals. AF developed in 28 SS patients (AF group) within 1 year of pacemaker implantation. Their mean age was not significantly different from 207 patients (non-AF) who did not develop AF (mean age 74.1 ± 8.4 vs 73 ± 12.1 years). AF patients had AEGM amplitude slightly larger than non-AF patients (4.27 ± 2.19 vs 3.63 ± 1.67 mv, NS), but there was no significant difference in P wave SLEW rate (1.07 ± 0.77 vs 0.92 ± 0.62 V/S, NS). VEGM amplitude was significantly larger in the AF group compared to non-AF (13.6 ± 6.3 vs 10.7 ± 4.4 mV, $p < 0.01$). Intracardiac conduction intervals, corrected sinus node recovery time and AV Wenckebach points were not significantly different between AF and non-AF groups. AEGM and VEGM amplitudes and SLEW rates of AF and non-AF patients showed no statistically significant difference when compared with CHB patients. No correlation was found between AEGM and VEGM amplitudes and SLEW rates with age. It is concluded that the amplitude of the atrial electrocardiogram cannot be used as a predictor of future development of atrial flutter/fibrillation in SSS and that this parameter does not show any significant change in SSS or with age. However, VEGMs are significantly different and high VEGMs may predict future atrial flutter and fibrillation.

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THERAPEUTIC AGENTS AS INDUCERS OF A SYNDROME OF ASEPTIC MENINGITIS. *HJ Chaudhry, MS, DO,* Department of Medicine, St. Barnabas Hospital, Cornell University Medical College, Bronx, NY.

The non-steroidal anti-inflammatory agents Ibuprofen, Tolmetin and Sulindac have been described in the literature as inducers of a syndrome of aseptic meningitis, particularly in women and in patients with underlying autoimmune or collagen vascular disorder. Other therapeutic agents implicated to cause meningitis include Azathioprine, Penicillin, Isoniazid, Trimethoprim-Sulfamethoxazone, Phenazopyridine and intravenous high dose Cytosine-Arabinoside. Although the mechanism of drug-induced meningitis is not known, it has been suggested that an acute hypersensitivity reaction limited to the meninges may play a role in the pathogenesis. A review of the literature is presented with the aim of promoting a heightened awareness of this rare but reversible syndrome.

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ACUTE TUBERCULOUS PERITONITIS AS AN INITIAL MANIFESTATION OF HIV INFECTION - CASE REPORT. *AO Soubani, MD,* Medical Resident, Nassau County Medical Center, East Meadow, NY.

A 25 year old homosexual male was admitted on 10/5/89 with acute abdominal pain, fever, and vomiting. He underwent emergency exploratory laparatomy that revealed numerous necrotic peritoneal nodules. Histopathology showed caseating granulomas. Stain showed acid fast bacilli and culture was positive for Mycobacterium tuberculosis. He was started on anti-tuberculous treatment. However, the patient succumbed to fungal septicemia and multiorgan failure.

Mycobacterial infection is a common complication in patients with AIDS. Studies indicate that between 10-20% of AIDS patients have tuberculosis. The high prevalence of extrapulmonary manifestations of tuberculosis (60-80%) has also been frequently emphasized in literature. Lymph nodes, urogenital and bone marrow are commonest forms. Peritoneal involvement is rarely seen in AIDS patients. In general, abdominal pain is reported in approximately 12% of AIDS patients, with wide spectrum of unusual intra-abdominal pathology including gastrointestinal infections as Cryptosporidium, Mycobacterium avium-intracellulare and Cytomegalovirus, malignancies as Kaposi sarcomas and miscellaneous causes as pentamidine pancreatitis. Although rare, tuberculous peritonitis should be considered in the differential diagnosis of abdominal pain in AIDS patients. We present this case for rarity of occurrence, the acute presentation, fulminant course, and lack of evidence of pulmonary involvement in spite of severity.

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LEFT MAIN CORONARY ARTERY DISEASE. *HF Nagamia, MD,* Department of Cardiovascular Surgery, Tampa Heart Center, Tampa General Hospital, Tampa, FL.

Coronary Artery Disease (CAD) continues to be the number one killer in the U.S.A. and in most European nations. Multiple new modalities continue to evolve in the fight against this killer with the latest advent being balloons (PTCA), lasers (ELCA), arthrectomy devices of various sorts (DCA, TEC, RCA), and medicines. Controversies have raged about the role of surgery versus medical or nonsurgical therapy in these patients. However, left main coronary artery disease (LMCAD) constitutes a unique subset of patients.

For at least two decades, it has been well recognized that Left Main Coronary Artery Disease (LMCAD) is predominantly a surgical disease. These patients are the most ill and often present with sudden cardiac death (SCD).

The incidence, mode of presentation, assessment, pre-operative, intra-operative and post-operative management of LMCAD will be discussed in this paper with illustrative case reports.

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CT-GUIDED TRANSTHORACIC FINE-NEEDLE ASPIRATION BIOPSY: EXPERIENCE WITH 109 CONSECUTIVE CASES. *A Khan, MD, PG Herman, MD, S Feit, MD,* Department of Radiology, Long Island Jewish Medical Center, The Long Island Campus for the Albert Einstein College of Medicine, New Hyde Park, NY.

The objective of this study was to assess the diagnostic utility and complication rate of CT-guided transthoracic fine-needle aspiration biopsy (FNAB) in non-selected consecutive patients.

One hundred and nine patients (53 males and 56 females, age range 14-84 years) underwent FNAB under CT-guidance using a G.E. 9800 Quick System. All biopsies were performed using a 19 gauge introducer needle through which a 22 gauge cutting needle was advanced.

The sensitivity for proven malignant disease (n = 90) was 94% and specificity was 100%. The diagnostic yield for lymphoma (n = 4), mesothelioma (n = 2) and malignant thymoma (n = 1) was low. There was a relatively low complication rate: 19% developed pneumothorax, with 6% requiring chest tube.

CT-guided fine needle aspiration biopsy of the chest on non-selected consecutive patients has a high diagnostic yield and a relatively low complication rate. Direct visualization of the needle in the target lesion increases the level of confidence for true negative lesions.