DOI: http://dx.doi.org/10.5915/18-3_4-12797

1

THE EARLY HISTORY OF KING EDWARD MEDICAL COLLEGE, LAHORE, AND THE EVOLUTION OF MEDICAL EDUCATION IN THE 19th CENTURY INDO-PAKISTAN SUBCONTINENT:

S. Amjad Hussain, M.B.B.S., FRCS, FACS, FRS (England), Chairman, Department of Thoracic and Cardiovascular Surgery, St. Charles Hospital, Clinical Associate Professor of Surgery, Medical College of Toledo, Ohio.

With the establishment of the imperial government of India in the 19th century, the western medicine arrived in the subcontinent by way of the civil service and armed forces. The prevailing systems of medicine practiced in India were Greeko-arabic (Unani) and old Hindu medicine (Ayurvedic). The first medical college was started in Calcutta in 1822 and thereafter, the colleges were started in Madras, Bombay and Lahore. The establishment of these institutions opened the way for the natives to get educated in western medicine and to enter the civil service and the armed forces.

Lahore medical school, the forerunner of the King Edward Medical College, was established in Lahore in 1860. From its humble beginning in the stables of Raja Suchet Singh near the Tibbi bazar this institution developed into one of the premier medical institutions of the subcontinent and the south east Asia. History of the early days of King Edward Medical College is the history of the medical education in the Indo-Pakistan subcontinent.

The unsung and unrecognized heroes of those early formidable days were the natives who became students in such institutions and despite a different educational background proved themselves to be good students and excellent practitioners of western medicine. One such student was Syed Shar Shah who graduated in the first graduating class of the Lahore Medical School in 1863. Despite many personal and family difficulties,he succeeded in becoming a doctor and served the next forty seven years in the government service. This lecture will discuss the inception of medical education and King Edward Medical College;show the teaching material used during that era and will introduce a brief sketch of one of the first students of that college.

2

TWICE DAILY THERAPY OF BACTERIAL BRONCHITIS WITH CIPROFLOXACIN, A NEW QUINOLONE ANTIBIOTIC - RESULTS IN 133 PATIENTS - S. Raoof, F.A. Khan, C. Wollschlager*; Pulmonary Medicine, Queens Hospital Center, Jamaica, New York, U.S.A.

We evaluated the efficacy and safety of Ciprofloxacin (cipro) in patients with bacterial bronchitis. Cipro was administered orally in a dose of 750 mg. B.I.D. in a prospective and controlled clinical trial. Bacterial bronchitis was defined as presumed if patients had compatible clinical features of respiratory tract infection or proven if they had, in addition, a positive sputum culture. 133 patients were found eligible, and received cipro for a mean duration of 9.0 days. A clinical cure was achieved in 127/133 (95%) cases receiving ciprofloxacin. Those who failed the clinical trial included 3 patients with pneumonia, 2 with chronic persistent asthma, and 1 with COPD. Of the 106 patients with proven infection, 95 (91%) had bacterial eradication at the end of therapy. Bacterial isolates obtained included Hemophilus spp (60), E. coli (5), Klebsiella spp (12), Pseudomonas spp (13), other gram negatives (27), Strept. pneumoniae (8) and other gram positives (6). Pre-treatment in-vitro bacterial resistance was encountered in only 5% cases. The results of this trial are tabulated:

		CLINICAL		BACTERIAL		SIDE-EFFECTS	
		Cure	Fail	Cure	Fail	G.I.T.†	↑ STL**
CIPRO N=133	Proven	101	3 95%	95/104	9/104	14/133	17/46
	Presumed	26	3 Cure	(91%)	(9%)	(10.5%)	(37%)

** ↑STL: Increase in Serum Theophylline levels. †GIT: Gastrointestinal Tract

We conclude: 1) Cipro shows broad, in-vitro antibacterial activity 2) It is highly effective therapy for respiratory tract infections with the marked advantage of BID dosing and good sputum sterilization 3) Cipro is associated with a trend to increasing serum theophylline levels.

3

CURRENT STATUS OF HEALTH AND NUTRITION IN THE DEVELOPING COUNTRIES:FOCUS ON THE MUSLIM WORLD:Abdul A. Quraishi, Ph.D., Director, Scientific American Foods Company, P O Box 21531, Columbus, Ohio 43221.

Despite their large population of 1.1 billion and a vast area covering 20% of the planet, the Muslim World consisting of 50 sovereign nations, finds itself at the bottom of the economic totem pole. Because of centuries of hostility rooted in our philosophies, the champions of materialism and communism waste their energies and resources in subjagating or fighting the adherents of Islam rather than offering meaningful assistance leading to self-sufficiency. Dependence on foreign assistance from the affluent nations of these two camps will only compound and perpetuate the tragedy. United under the banner of the UWIN (Union of World Islamic Nations),the Muslims who occupy an area equivalent to the total area of the U.S.S.R. and the U.S.A. and have twice as many people, produced only 20% of the combined G.N.P. of the two superpowers during 1983, when they have the potential for overproducing both the blocks.

A close examination of the vital statistics portrays a picture of doom and gloom. In 47 out of the 50 Muslim majority countries the life expectancy was well below the world average of 55 years and in 35, the infant mortality rate far exceeded the average of 98/1,000 live births during 1983. Similarly in 36 and 34 countries, the population per hospital bed and per physician exceeded 500 and 5000 respectively. Some 44, 43 and 46 countries consumed less than the world average of 2600 calories, 70 g. protein and 8 oz. milk daily respectively. The bottom line is that the Muslim World is more underdeveloped than the Developing World. In this paper the author has good use of the visual material and proposes a workable plan for collective action through self-help to achieve self-sufficiency in true Islamic spirit, for the entire UWIN.

4

MEASURING THE INFLUENCE OF NUTRITIONAL MESSAGES USING ARIMA INTERVENTION METHODS: Syed A. Hussain, Ph. D., Beatrice Refrigerated Foods, 1919 Swift Drive, Oak Brook, Illinois.

This research measures the effects that an American Heart Association nutritional game has upon the mean intake of calories, desserts, and skim milk of patrons of a university cafeteria. Patron food choices were unobtrusively measured for 16 weeks by means of a computerized cash register inventory system, then, the effects of the media-based nutritional game were estimated using ARIMA-intervention methods. During promotion of the game, patrons reduced their mean caloric intake by 5%, desserts by 19%, and increased consumption of skim milk by 40%. First order and compound intervention effects persisted after the game. As shown, the "Food For Thought" game was effective and yielded results generalizable to similar social marketing campaigns and educational programs.

5

MANAGEMENT OF INTRACRANIAL BLEEDING WITH PREGNANCY AND VASCULAR MALFORMATION: Ghaus M. Malik, M. D., Randy Gehring, M. D., James I. Ausman, M. D., and Chang Lee, M. D., Department of Neurosurgery, Henry Ford Hospital, Detroit, Michigan 48202.

While up to 10% of all maternal deaths during pregnancy and the subsequent six months have been attributed to subarachnoid hemorrhage, limited attention has been given this subject in the larger series of vascular malformations. Vascular malformations are the most common source of intracranial hemorrhage in pregnancy. There is a large volume of data concerning gestational date associated with intracranial hemorrhage, incidence of rebleeding, and possible factors contributing to rebleeding which was compiled predominantly before routine use of computed tomography and with less sophisticated angiography.

At Henry Ford Hospital from 1975-1985 six patients with angiographically documented malformations with hemorrhage during pregnancy the post partum period were treated. Two additional patients with intracerebral hemorrhage, but without angiographically demonstrable malformations, were seen over the same period. Case histories are presented and our experience compared to a review of the literature. An individualized approach for management of intracranial hemorrhage secondary to vascular malformations in pregnancy is stressed.

6

RECOVERY OF NATIVE KIDNEY FUNCTION IN PATIENTS WITH SEGMENTAL SCLEROSIS AFTER TRANSPLANT:Muhammad R. Khawar, M. D., Maria Fusi, M. D., Andrew Pomprontz, M. D., and Amir Tejani, M. D., Department of Pediatric Nephrology, State University of New York, Downstate Medical Center, Brooklyn, New York..

Recovery of native kidney functions in patients with focal segmental glomerulosclerosis (FSGS) after renal transplantation has not been described. We are reporting two patients whose native kidney functions improved after transplantation. Nephrotic syndrome, resistent to steroids, developed at 3½ years of age in the first patient. Renal biopsy showed FSGS. He was intermittently treated with albumin and diuretics but his functions deteriorated (creatinine-6.2 mg/dl, BUN:60-100 mg/dl) and a cadaveric rental transplant was done at 9 years of age.His serum creatinine fell to 1 mg%.The patient received cyclosporin and steroids. During a work-up for lower abdominal pain,1½ years after surgery, DTPA scan showed no uptake by transplant kidney.A DMSA scan showed vivid uptake by his native kidneys but no uptake by transplant kidney which on biopsy showed complete infarction.The second patient had nephrotic syndrome due to FSGS at age 12 which was resistent to steroids.He received hemodialysis and later a cadaveric transplant at age 13. He was discharged on cyclosporin and prednisone.At age 15 he developed proteinuria and a biopsy of the transplant kidney did not show recurrence of the disease. His DTPA scan showed poor uptake by transplant kidney and DMSA scan showed equal function in all 3 kidneys. Recovery in these two patients may be due to cyclosporin. We have seen renal function recovery at our institution in 6 of 9 patients with FSGS and 8 of 11 patients with other diseases who had presented with recurrent nephrotic syndrome and did not receive transplants. Further controlled trials with long term cyclosporin use in FSGS patients are indicated.

1

THE EARLY HISTORY OF KING EDWARD MEDICAL COLLEGE, LAHORE, AND THE EVOLUTION OF MEDICAL EDUCATION IN THE 19th CENTURY INDO-PAKISTAN SUBCONTINENT:
S. Amjad Hussain, M.B.B.S., FRCS, FACS, FRS (England), Chairman, Department of Thoracic and Cardiovascular Surgery, St. Charles Hospital, Clinical Associate Professor of Surgery, Medical College of Toledo, Ohio.

With the establishment of the imperial government of India in the 19th century, the western medicine arrived in the subcontinent by way of the civil service and armed forces. The prevailing systems of medicine practiced in India were Greeko-arabic (Unani) and old Hindu medicine (Ayurvedic). The first medical college was started in Calcutta in 1822 and thereafter, the colleges were started in Madras, Bombay and Lahore. The establishment of these institutions opened the way for the natives to get educated in western medicine and to enter the civil service and the armed forces.

Lahore medical school, the forerunner of the King Edward Medical College, was established in Lahore in 1860. From its humble beginning in the stables of Raja Suchet Singh near the Tibbi bazar this institution developed into one of the premier medical institutions of the subcontinent and the south east Asia. History of the early days of King Edward Medical College is the history of the medical education in the Indo-Pakistan subcontinent.

The unsung and unrecognized heroes of those early formidable days were the natives who became students in such institutions and despite a different educational background proved themselves to be good students and excellent practitioners of western medicine. One such student was Syed Shar Shah who graduated in the first graduating class of the Lahore Medical School in 1863. Despite many personal and family difficulties,he succeeded in becoming a doctor and served the next forty seven years in the government service. This lecture will discuss the inception of medical education and King Edward Medical College;show the teaching material used during that era and will introduce a brief sketch of one of the first students of that college.

2

TWICE DAILY THERAPY OF BACTERIAL BRONCHITIS WITH CIPROFLOXACIN, A NEW QUINOLONE ANTIBIOTIC - RESULTS IN 133 PATIENTS - S. Raoof, F.A. Khan, C. Wollschlager*; Pulmonary Medicine, Queens Hospital Center, Jamaica, New York, U.S.A.

We evaluated the efficacy and safety of Ciprofloxacin (cipro) in patients with bacterial bronchitis. Cipro was administered orally in a dose of 750 mg. B.I.D. in a prospective and controlled clinical trial. Bacterial bronchitis was defined as presumed if patients had compatible clinical features of respiratory tract infection or proven if they had, in addition, a positive sputum culture. 133 patients were found eligible, and received cipro for a mean duration of 9.0 days. A clinical cure was achieved in 127/133 (95%) cases receiving ciprofloxacin. Those who failed the clinical trial included 3 patients with pneumonia, 2 with chronic persistent asthma, and 1 with COPD. Of the 104 patients with proven infection, 95 (91%) had bacterial eradication at the end of therapy. Bacterial isolates obtained included Hemophilus spp (60), E. coli (5), Klebsiella spp (12), Pseudomonas spp (13), other gram negatives (27), Strept. pneumoniae (8) and other gram positives (6). Pre-treatment in-vitro bacterial resistance was encountered in only 5% cases. The results of this trial are tabulated:

	CLINICAL		BACTERIAL		SIDE-EFFECTS	
	Cure	Fail	Cure	Fail	G.I.I.†	↑ STL**
CIPRO N=133 Proven	101	3 (95%)	95/104	9/104	14/133	17/46
CIPRO N=133 Presumed	26	3 Cure	(91%)	(9%)	(10.5%)	(37%)

** ↑STL: Increase in Serum Theophylline levels. †GII: Gastrointestinal Tract

We conclude: 1) Cipro shows broad, in-vitro antibacterial activity 2) It is highly effective therapy for respiratory tract infections with the marked advantage of BID dosing and good sputum sterilization 3) Cipro is associated with a trend to increasing serum theophylline levels.

3

CURRENT STATUS OF HEALTH AND NUTRITION IN THE DEVELOPING COUNTRIES:FOCUS ON THE MUSLIM WORLD:Abdul A. Quraishi, Ph.D., Director, Scientific American Foods Company, P O Box.21531, Columbus, Ohio 43221.

Despite their large population of 1.1 billion and a vast area covering 20% of the planet, the Muslim World consisting of 50 sovereign nations, finds itself at the bottom of the economic totem pole. Because of centuries of hostility rooted in our philosophies, the champions of materialism and communism waste their energies and resources in subjagating or fighting the adherents of Islam rather than offering meaningful assistance leading to self-sufficiency. Dependence on foreign assistance from the affluent nations of these two camps will only compound and perpetuate the tragedy. United under the banner of the UWIN (Union of World Islamic Nations),the Muslims who occupy an area equivalent to the total area of the U.S.S.R. and the U.S.A. and have twice as many people, produced only 20% of the combined G.N.P. of the two superpowers during 1983, when they have the potential for overproducing both the blocks.

A close examination of the vital statistics portrays a picture of doom and gloom. In 47 out of the 50 Muslim majority countries the life expectancy was well below the world average of 55 years and in 35, the infant mortality rate far exceeded the average of 98/1,000 live births during 1983. Similarly in 36 and 34 countries, the population per hospital bed and per physician exceeded 500 and 5000 respectively. Some 44, 43 and 46 countries consumed less than the world average of 2600 calories, 70 g. protein and 8 oz. milk daily respectively. The bottom line is that the Muslim World is more underdeveloped than the Developing World. In this paper the author has good use of the visual material and proposes a workable plan for collective action through self-help to achieve self-sufficiency in true Islamic spirit, for the entire UWIN.

4

MEASURING THE INFLUENCE OF NUTRITIONAL MESSAGES USING ARIMA INTERVENTION METHODS: Syed A. Hussain, Ph. D., Beatrice Refrigerated Foods, 1919 Swift Drive, Oak Brook, Illinois.

This research measures the effects that an American Heart Association nutritional game has upon the mean intake of calories, desserts, and skim milk of patrons of a university cafeteria. Patron food choices were unobtrusively measured for 16 weeks by means of a computerized cash register inventory system, then, the effects of the media-based nutritional game were estimated using ARIMA-intervention methods. During promotion of the game, patrons reduced their mean caloric intake by 5%, desserts by 19%, and increased consumption of skim milk by 40%. First order and compound intervention effects persisted after the game. As shown, the "Food For Thought" game was effective and yielded results generalizable to similar social marketing campaigns and educational programs.

5

MANAGEMENT OF INTRACRANIAL BLEEDING WITH PREGNANCY AND VASCULAR MALFORMATION: Ghaus M. Malik, M. D., Randy Gehring, M. D., James I. Ausman, M. D., and Chang Lee, M. D., Department of Neurosurgery, Henry Ford Hospital, Detroit, Michigan 48202.

While up to 10% of all maternal deaths during pregnancy and the subsequent six months have been attributed to subarachnoid hemorrhage, limited attention has been given this subject in the larger series of vascular malformations. Vascular malformations are the most common source of intracranial hemorrhage in pregnancy. There is a large volume of data concerning gestational date associated with intracranial hemorrhage, incidence of rebleeding, and possible factors contributing to rebleeding which was compiled predominantly before routine use of computed tomography and with less sophisticated angiography.

At Henry Ford Hospital from 1975-1985 six patients with angiographically documented malformations with hemorrhage during pregnancy the post partum period were treated. Two additional patients with intracerebral hemorrhage, but without angiographically demonstrable malformations, were seen over the same period. Case histories are presented and our experience compared to a review of the literature. An individualized approach for management of intracranial hemorrhage secondary to vascular malformations in pregnancy is stressed.

6

RECOVERY OF NATIVE KIDNEY FUNCTION IN PATIENTS WITH SEGMENTAL SCLEROSIS AFTER TRANSPLANT:Muhammad R. Khawar, M. D., Maria Fusi, M. D., Andrew Pomprontz, M. D., and Amir Tejani, M. D., Department of Pediatric Nephrology, State University of New York, Downstate Medical Center, Brooklyn, New York.

Recovery of native kidney functions in patients with focal segmental glomerulosclerosis (FSGS) after renal transplantation has not been described. We are reporting two patients whose native kidney functions improved after transplantation. Nephrotic syndrome, resistent to steroids, developed at 3½ years of age in the first patient. Renal biopsy showed FSGS. He was intermittently treated with albumin and diuretics but his functions deteriorated (creatinine-6.2 mg/dl, BUN:60-100 mg/dl) and a cadaveric rental transplant was done at 9 years of age.His serum creatinine fell to 1 mg%.The patient received cyclosporin and steroids. During a work-up for lower abdominal pain,1½ years after surgery, DTPA scan showed no uptake by transplant kidney.A DMSA scan showed vivid uptake by his native kidneys but no uptake by transplant kidney which on biopsy showed complete infarction.The second patient had nephrotic syndrome due to FSGS at age 12 which was resistent to steroids.He received hemodialysis and later a cadaveric transplant at age 13. He was discharged on cyclosporin and prednisone.At age 15 he developed proteinuria and a biopsy of the transplant kidney did not show recurrence of the disease. His DTPA scan showed poor uptake by transplant kidney and DMSA scan showed equal function in all 3 kidneys. Recovery in these two patients may be due to cyclosporin. We have seen renal function recovery at our institution in 6 of 9 patients with FSGS and 8 of 11 patients with other diseases who had presented with recurrent nephrotic syndrome and did not receive transplants. Further controlled trials with long term cyclosporin use in FSGS patients are indicated.

7

THE LAW OF INTESTINAL WATER ABSORPTION

Bashir A. Zikria, M.D., F.A.C.S., 2E-86th Street, New York, N.Y. 10028.

A number of experiments in dogs and rabbits have shown that hypoalbuminemia reduced water absorption and motility of gastro-intestinal tract often causing diarrhea.

This hypothesis was tested by collecting data in a patient who acted as an ideal physiologic preparation. This 59 year-old white female had lost all her small bowel except 3 feet of jejenum and one foot of ileum ending in an ileostomy. Her short bowel syndrome has been managed by eating dry foods and getting her fluids via a Dobhoff naso-enteral tube past 9 years. During her 2-4 yearly admissions for dehydration metabolic studies were carried out and patient was given serum albumin infussions to elevate her serum albumin levels to test the law of intestinal absorption.

The results of data from ileostomy outputs and serum albumin levels showed a direct linear relationship with a correlation coefficient of r=0.87. Whenever she was given 75-100gms. of serum albumin boosting her serum albumin, her ileostomy outputs rapidly decreased. The law which functions in the absorption of water in the small bowel appears to be an extension of the Starling's Law of capillary.

$(C_o = C_p \rightleftharpoons t_o + t_p) \rightleftharpoons I_o + I_p$. When capillary pressure (C_p), tissue pressure (t_p) and intraluminal intestinal pressure (I_p) are normal, it is the force of serum oncotic pressure (C_o) primarily determined by serum albumin, that makes water absorption possible from intestinal lumen.

8

SHOULDER ARTHROGRAPHY IN PAINFUL AND STIFF SHOULDERS: Raman Dhawan, D.Orth., M.S.(Orth), S. A. Sadiq, D. Orth.,M.D.(Orth), and Ritu Khanna, M.B., B.S., Department of Orthopedic Surgery, J. N. Medical College, Aligarh Muslim University, Aligarh, Uttar Pradesh, India.

Seventy patients with pain and limitation of movement at the shoulder joint were investigated by arthrography during 1983 and 1984, in the Department of Orthopedic Surgery in J.N. Medical College, Aligarh, India. These patients had pain and stiffness of shoulder despite conservative management for more than three months, and the diagnosis remained in doubt.These patients were graded according to pain, tenderness and limitation of movement. A thorough history, physical examination, laboratory studies and standard roentgenograms of the shoulder were obtained before performing arthrography. Arthrography was performed,using Conray 420 alone in single contrast arthrography and Air and Conray 420 in double contrast arthrography. Spinal needles were used for injections.The dye was injected under flouroscopy or image intensifier control and anterior approach was preferred as the joint could be visualized and the flow of the dye seen.There were no infections associated with the procedure. Arthrography of the shoulder was helpful in making the diagnosis of a variety of lesions:adhesive capsulitis or frozen shoulder,tears of rotator cuff, subluxation and tears of biceps tendon,and a combination of abnormalities. The double contrast shoulder arthrogram provided diagnostic accuracy equal to that of single contrast study,and has the added advantage of demonstrating the width of tear and quality of injured tendons.Pain and local discomfort after double contrast arthrography was less than after single constrast arthrography. In certain cases when rotator cuff was found to be intact arthrographic procedure resulted in partial or complete recovery of mobility of the joint.

We conclude shoulder arthrography is an accurate diagnostic adjuvant in patients with painful and stiff shoulders.The procedure is safe,simple, easy and can be carried out on an outpatient basis.

9

RATIONALE AND APPLICATION:CALCIUM ANTAGONISTS IN HYPERTENSION:

C. Venkata S. Ram, M. D., Dallas, Texas.

Although it has been shown that treatment of hypertension reduces cardiovascular morbidity and mortality, adherence to drug therapy is not optimal due to various adverse effects. Thus, there is a need to develop and utilize drugs that lower the blood pressure without inducing metabolic and other adverse effects. There is an increasing body of evidence which suggests that calcium antagonists may have an important role in the management of hypertension not only because of their efficacy but because they may reverse pathophysiological mechanism(s) associated with hypertension. It has also become apparent that some calcium antagonists may improve circulatory parameters and target organ functions. Nifedipine is useful in the management of urgent, refractory, and severe forms of hypertension. Verapamil is effective in the treatment of mild to moderate hypertension as monotherapy or in conjunction with diuretics. Experimental evidence has shown that these drugs cause modest natriuresis in contrast to other direct vasodilators. No untoward biochemical adverse effects have occurred in our clinical experience. In conclusion, calcium antagonists represent a major advance in the treatment of hypertension and it will be interesting to watch the impact of these compounds on cardiovascular function and disease.

10

A COMPARATIVE STUDY OF BONE DUST AND BONE CHIP CRANIOPLASTY:AN EXPERIMENTAL STUDY: Dr. S. M. Rara and Professor S.M. Ashraf,Department of General Surgery, J. N. Medical College, A.M.U. Aligarh, India.

This study is based on our observations in twenty adult dogs of canis familiari's species,which were divided into three groups, A,B and C and 2x3 cm defects were created in both parietal bones after stripping the periosteum, initially by burr holes and then enlarging them by rongeur. Group A consisted of ten dogs. On the right side,the defect was filled with bone dust (obtained while making burr holes)and the left side was kept empty. Group B consisted of five dogs. On the right side the defects were filled with bone chips (obtained while enlarging the defect with rongeur)and the left sides were kept empty. Group C consisted of five dogs. On the right side the defects were filled with bone dust and on the left sides with bone chips.After eight weeks the dogs were sacrificed and the top of the skull was removed.The defects were examined and x-rayed. In none of fifteen where the defects were left empty, was there complete filling of the defect by bone. In fifteen experiments where the defect was filled with bone dust and ten experiments where it was filled with chips, there was complete filling of the gap with bone. In cases where the gap was filled with dust the bone formation was thin but smooth, on inner and outer side, whereas in ten cases where the defect was filled with bone chips the bone formation was thick but irregular on boths sides with occasional spicules. Bone dust cranioplasty is a good method for filling small cranial defects and may have its clinical application.

11

ASBESTOS RELATED PLEURO-PULMONARY PROBLEMS: Bashir A. Chaudhary, M. D., Tesneem K. Chaudhary, M. D., William A. Speir, M. D., Department of Medicine, Medical College of Georgia, Augusta, Georgia.

It is estimated that in the U.S. 600 workers are employed in mining and milling, 3700 work with asbestos, 300,000 are occupationally exposed and millions have environmental exposure. Crocidolite (blue), chrysolite (white), amosite (brown) and anthophyllite are the common types of asbestos fibers (fibrous silicate). Ferruginous bodies are iron coated asbestos fibers. Asbestos bodies give an indication of exposure ie more than 100 bodies/g of lung usually indicate occupational exposure. High concentration of asbestos fibers (eg 120,000/g) may be found in general population. Pulmonary fibrosis is called asbestosis and causes dyspnea, crackles, restrictive ventilatory defect and radiologic changes of fibrosis predominantly in lower lobes and is more severe in smokers. Lung cancer is usually adenocarcinoma, occurs in the periphery and in lower lobes. The risk of development of lung cancer may be 70 times higher if the asbestos worker is a heavy cigarette smoker. There may be 20-40 years of latent period from the onset of exposure to the development of asbestosis and lung cancer. Localized pleural thickening (plaques), are the commonest manifestations of asbestos exposure. Pleural thickening may be diffuse or accompanied by pleural effusion. Mesothelioma can occur after minor and indirect exposure and is not related to cigarette smoking. It has been estimated that annual mortality from asbestos may include 10,000 lung cancer, 1200 mesothelioma and 100 asbestosis deaths. In addition to protective garments, cessation of smoking is the most important step in the prevention of asbestos related problems.

12

INTERVENTIONAL RADIOLOGY. Saadoon Kadir, M.D., Associate Professor of Radiology, The Johns Hopkins Medical Institutions, Baltimore, M.D., 21205-2191

Interventional Radiology provides a non-operative means for establishing diagnoses and for providing treatment for certain diseases.

In the vascular system, percutaneous transluminal angioplasty is now an established method for the treatment of coronary, pulmonary renal and peripheral arterial stenoses. Other applications of angioplasty include dilatation of strictures of the bile ducts and ureters. Elective transcatheter embolization is used for the management of arteriovenous malformations, some tumors, occlusion of the testicular veins in patients with infertility and varicoceles, and for occlusion of aneurysms of the visceral arteries. It has also been used effectively for the emergency management of hemorrhage, especially in patients with pelvic trauma and gastrointestinal hemorrhage.

In the biliary tract, percutaneous transhepatic biliary drainage (PBD) provides relief of obstructive jaundice in patients with benign and malignant disease. In addition, PBD is the treatment of choice for post-operative bile leaks and fistulae. Furthermore, the transhepatically placed catheters provide access to the biliary tract for transluminal biopsy, stricture dilatation and stone retrieval.

Percutaneous nephrostomy provides access to the urinary system for decompression in patients with acute obstruction, percutaneous lithotripsy or stone retrieval and for the dilatation of ureteric strictures.

13

BODY CT - AN UPDATE: Afra Khan, M. D., Chief, Division of Thoracic Imaging, Department of Radiology, Long Island Jewish Medical Center, New Hyde Park, New York.

With the introduction of high resolution scanners and short scanning times of 2-8 seconds, CT has become an important procedure in the diagnosis of diseases of chest and abdomen. However, with the availability of different imaging modalities, body CT may be overutilized or underutilized in different clinical settings. In a cost-conscious era, radiologist must play an increasing role in helping the referring physician determine which test will best provide the required radiological information.

In the evaluation of chest, plain chest radiograph remains the initial procedure of choice. CT, however, has replaced conventional tomography for evaluation of mediastinum, bronchogenic carcinoma and pulmonary nodules. CT, at present, has a limited role in the evaluation of diffuse lung disease. CT with intravenous contrast is useful for evaluation of aortic aneurysm including dissecting aneurysms; however, CT is less sensitive than angiography for evaluation of traumatic aneurysms.

In the abdomen, CT is the procedure of choice for evaluation of focal hepatic masses, pancreatic neoplasms, and adrenal masses. While ultrasound is initially utilized for evaluating renal masses, CT has largely replaced angiography for diagnosis and staging of renal neoplasms. In patients with lymphoma, CT is utilized as an initial staging procedure, obviating the need for lymphangiography in most of the cases.

14

DIAGNOSIS OF HYPOXIC-ISCHEMIC LESIONS IN INFANTS BY REALTIME CRANIAL SONOGRAPHY
Asma Q. Fischer, MD, Assistant Professor, Neurology, Pediatric Neurology and Pediatrics, Medical College of Georgia, Augusta, GA

Hypoxic-ischemic lesions (HIL) of the preterm and term brain are important to the clinician as they account for many infants presenting with mental retardation, seizures and cerebral palsy. In an effort to develop a reliable non-invasive method of imaging HIL in infants, we performed 453 cranial sonograms between the ages of 0-13 months using high resolution realtime sonography in standarized planes. Computed cranial tomography (CCT) or pathology confirmation was sought in the majority of cases. The sonograms were interpreted without the knowledge of the CCT interpretation and the CCTs were interpreted without the knowledge of the sonograms. Results: Total sonograms = 453. Types of HIL: strokes-10, Periventricular Leukomalacia (PVL) 9, cerebral atrophy (CA) -15, Hypoxic-ischemic encephalopathy-10. Sonograms and CCTs of each subgroup will be presented. Conclusions: The specificity and sensitivity of the diagnosis of CA by sonography is 100% when compared to CCT. Acute and hemorragic strokes are hyperechoic. Chronic strokes are hypoechoic and later become anechoic. Acute PVL hyperechoic, chronic PVL anechoic. Severe Hypoxic ischemic encephalopathy shows a 'speckle' pattern.

15

PRINCIPLES, APPLICATIONS, LIMITATIONS AND FUTURE OF MAGNETIC RESPONSE IMAGING: Elias A. Zerhouni, M. D., Department of Radiology, Johns Hopkins University, Baltimore, Maryland.

Magnetic Resonance Imaging (MRI) is the latest of the technologies introduced in diagnostic imaging over the last ten years. MRI relies on the alignment of nuclei within a spatially dependent magnetic field. Radio frequency waves equivalent to those of a standard FM radio station are then used to "interrogate" the nuclei and measure their resonse. In this presentation we will discuss how this can be done. Currently, MRI has found its greatest area of application in the brain and nervous system but rapid progress is being made in cardiovascular imaging to study structure as well as flow. In the rest of the body, the musculoskeletal system and pelvis are the main areas of application. Because of the long scan times (5 to 9 minutes) and the resultant motion artifacts, MRI of the chest and upper abdomen is lagging behind the other applications, but newer techniques allowing images to be acquired in 10 seconds will soon change that. More exciting is the prospect of being able to image metabolic processes by in vivo magnetic resonance spectroscopy. For example, the metabolites participating in the energy exchange of muscle can be observed and their changes during ischemia measured. Our own work shows that the inflammatory response of tissues can be detected and monitored.

Examples of all these MRI applications will be presented.

16

MEDICAL PROBLEMS OF AFGHANISTAN REFUGEES: Professor Bashir A. Zikria, M. D., F.A.C.S., Columbia University, 2-E, 86th Street, New York, New York.

I am most honored to speak in the memory of that great luminous Islamic intellect of philosophy and medicine, Ibn Sina. "The Prince of Physicians as he became known in the West, demonstrated a mind like Goethe's, a genius similar to Leonardo de Vinci's...It is clear that no Muslim or Oriental scholar has attained as high a position and has held as strong and enduring an influence as Avicena has in the history of the world." It is the irony of our times that today Soviets are mass killing in the same lands of Iba Sina's birth, Balkh and Bukhara where he taught the art of healing.Since KGB engineered military coup of April 27, 1978, 1.3 million Afghans have lost their lives, 4.9 million have lost their homes, 60 - 70% of their agriculture has been destroyed.

Inside of Afghanistan infant mortality has reached 300 per 1000 - from protein malnutrition and common childhood disease such as measles. Malaria which was declared conquered by WHO in 1976, today has reached active stage of 50 per 1000. Tuberculosis which was under control before Marxist coup is devastating our people at the rate of 130 per 1000 in certain localities. As one would expect, inside Afghanistan with the present Soviet escalation of the war of depopulation and genocide, the health conditions are those of a state of war in a lonely valiant Islamic nation against the technological might of an atheistic merciless super power. Priorities, of course, are those of a true Jehad, a fards, the duty of participation for every Afghan and every Muslim of this shrinking world.

17

NONINVASIVE ASSESSMENT OF CARDIAC LESIONS BY COLOR DOPPLER ECHOCARDIOGRAPHY: Navin C. Nanda, M. D., Professor of Medicine, University of Alabama at Birmingham, Birmingham, Alabama.

Color Doppler echocardiography is an exciting and innovative technique which has been recently developed to overcome some of the limitations of conventional Doppler echocardiography. Employing signal processing techniques called moving target indicator and autocorrelation, blood flow patterns are superimposed on realtime two-dimensional echocardiographic images. Using a color convertor, flow towards the transducer is coded as red while flow away from the transducer is depicted in blue. Various amounts of green are added to show the degree of turbulence or variance and this often results in the turbulent flow presenting a distinctive mosaic pattern of colors. Color Doppler echocardiography has found widest application in reliable detection and assessment of severity of both atrio-ventricular and semilunar valve incompetence. In our experience, both the sensitivity and specificity of color Doppler for the detection of mitral and aortic regurgitation is very high in patients with adequate acoustic windows. In 82 patients with proven mitral regurgitation studied by us, the best correlations with angiography were noted when the maximum and average regurgitant jet areas obtained by color Doppler from three standard 2-D echo planes (parasternal long and short axis and apical four chamber view) and expressed as a percentage of the left atrial area were considered. For aortic regurgitation, the width of the regurgitant jet immediately beneath the aortic valve when expressed as a ratio of the left ventricular outflow tract width was shown to reliably predict the angiographic grading of severity. The color Doppler technique also supplements conventional Doppler in the assessment of severity of stenotic lesions by facilitating parallel alignment of the continuous wave Doppler cursor line with the stenotic jet for accurate recording of maximal velocities and pressure gradients. This has proven especially useful in the evaluation of patients with aortic valve stenosis. Also, the width of the stenotic jet at the valve level has correlated with the severity of stenosis. Various congenital and acquired shunt lesions have also been diagnosed by this technique which graphically demonstrates blood flowing through the communication. In conclusion, color Doppler flow mapping combined with conventional echocardiography provides, for the first time, a comprehensive noninvasive assessment of the severity of regurgitant, stenotic and shunt lesions.

18

MYOCARDIAL INFARCTION IN KASHMIR

Prof.Allaqaband,G.Q.,Dr.Rissam,H.S.,Dr.Kamili,M.A.,Dr.Kapoor,S.
(Department of Medicine,Medical College,Srinagar-Kashmir(India)

200 cases of Acute transmural (Q.waveland 100 cases of non transmural(non Q wave) infarcts were studied in cardiology unit of SMHS Hospital from April1984 onwards.

Majority of our patients were muslims and from urban areas in both groups 5th and 6th decades were the commonest age groups,but no patients above 70 years was seen with non Q wave infarct. Male/female ratio was 3:1 in non Q and 4:1 in Q wave infarcts.

Antero-lateral(34%) was the commonest site of infarction in non Q while Anterior wall (45.3%)in Q wave infarct. Majority of patients in both groups presented in Killip 1--86% of non Q and 64% of Q wave. Pain chest 70% and 74% was commonest symptom in Q and non Q infarcts respectively. Smoking (70%)and Hypertension (60%)were most common risk factors and were equally common in both groups.

All complications like Cardiogenic shock,Pulmonary edema,C.C.F were much less common in non Q wave infarcts. Arrhythmias and blocks were 44% and 16 % in non Q while 76 and 30% in Q wave infarcts respectively. Over all mortality was 2 % in non Q as compared to 22.5% in Q wave infarcts. The details of data will be discussed.

19

INNOVATIONS IN COSMETIC DENTISTRY: Safdar Hussain Chadda, D.D.S., F.A.G.D., Assistant Clinical Professor, New York University Dental College, New York.

Cosmetic and esthetic success in restorative dentistry has become an intergral part of modern dental practice. Vast media exposure has created a more enlightened and educated dental consumer, one who may come to your office with specific cosmetic expectations. Results which satisfy both dentist and patient depend on meticulous attention to selection of restorative material and dentist perception of esthetic effects. Esthetic management of fractured teeth, malposed and malformed teeth, diastemas and stained teeth are discussed. Stained teeth (due to tetracycline) and fractured teeth can be covered by composite acrylic and with extremely satisfying clinical results. Teeth with spaces can be approximated. Permanent replacement of the teeth can be done with bridges without any cutting or crowning of the adjacent teeth as has been done in the past.

Details such as proper size, shape and form, use of illusions, special characterization often makes the difference in the creation of a superlative restoration. Mostly pain free nature of the procedure has revitalized the dental profession and delighted the appreciative patient.

20

NON-FAMILIAR APPLICATIONS OF LASER IN THE TREATMENT OF OPHTHALMOLOGIC DISORDERS: Khalid J. Awan, M. D., F.P.A.M.S., 1921 Park Avenue, S.W., Norton, Virginia.

Light amplification by stimulated emission of radiation (LASER) application in the management of many ocular disorders, such as diabetic retinopathy, chorioretinal vascular abnormalities, and intraocular tumors has become well established. Laser trabeculoplasty and iridotomy have become preferred non-medical procedures prior to filtering surgery for glaucomas of various types. However, the use of laser in the treatment of extraocular conditions remains unfamiliar. The author devised and established the effectiveness of laser application in managing several extraocular conditions. In 1985, he first introduced laser punctoplasty in the treatment of punctal stenosis. He has also successfully managed trichiais, punctal eversion, phthiriasis palpebrarum and postoperative high astigmatism by laser phototherapy. For laser punctoplasty, he uses argon laser at setting of 200-micron spot, 0.2 second time, and 1200 to 1500 mW power; for trichiasis, 50- to 200-micron spot, 0.2 second time, and 1000 to 1200 mW power; for punctal eversion, same as for trichiasis; for photolysis of sutures for postoperative astigmatism, 50- to 100-micron spot, 0.1 second time, and 200 mW power; for phthiriasis palpebrarum, 200-micron spot, 0.1 second time, and 200 mW power; and for vitreous cysts, another laser application first described by the author, 200-micron spot, 0.1 second time, and 500 mW power. Using these techniques of laser phototherapy, 14 canes of trichaisis, seven cases of punctal stenosis, two cases of punctal eversion, two cases of phthiriasis palpebrarum, eight cases of postoperative astigmatism, and one case of vitreous cyst were successfully treated.

21

ACCIDENTAL OCULAR INJURIES FROM COMMERCIAL ADHESIVES: Muhammad Humayun, M. D., F.P.A.M.S., 176 Portland Street, Suite 306, Dartmouth, Nova Scotia, Canada B2Y1J3.

Commercial adhesives, such as crazy glue, are made up of methyl-2-cyanoacrylate plus nontoxic plasticizer, thickening agent polymethylmethacrylate, and SO_2. Cyanoacrylate monomers are usually synthesized by base catalyzed condensation of formaldehyde. Methyl-2-cyanoacrylate produces marked tissue reaction and is more toxic than the long chain butyl and heptyl derivatives. Butyl-2-cyanoacrylate is currently most readily available for surgical procedures, because of its lesser tissue toxicity. Commercial adhesive (Eastman 910) is a methyl-2-cyanoacrylate, a polycyanoacrylate that is subsequently depolarized to yield the monomer. This reaction is reversible and the polymer decomposes to formaldehyde and corresponding cyanoacylate under favorable condition. This probably is responsible for the tissue toxicity of cyanoacrylate adhesives. The toxic effects of these adhesives include edema and abrasion of the skin, adhesions and the loss of eyelashes in lids, chemical keratoconjunctivitis, subconjunctival hemorrhages, punctate keratitis, and corneal ulcers on rare occasions. Uveitis may also be seen in some cases. The therapeutic use of the adhesives usually is not accompanied with these complications, but accidental cases do show considerable toxicity, as shown by the patients shown here. Fortunately, the toxicity clears without permanent damage to eye tissues in most instances. The management include preventive measures including public education and warning labels on the products, and surgical removal of the material. In some cases, acetone may be used to dissolve the glue by rubbing it with acetone soaked cottontip applicators.

22

HOW TO SURVIVE IN THE CURRENT COST-CONTAINMENT ENVIRONMENT: Mohammad N.Akhter, M.D., M.P.H., Executive Vice President, Missouri Patient Care Review Foundation, Jefferson City, Missouri.

To slow the rapidly escalating cost of health care, the United States Government acted by creating a prospective payment system for inpatient care of Medicare patients commonly known as DRGs. Under this system, a fixed amount is paid for each admission by assigning one of the 471 DRGs to that admission, regardless of the length of stay.

Along with the implementation of the prospective payment system, the federal government also implemented the PRO program to oversee the implementation of the DRG program and to assure that only those patients needing inpatient care are admitted to hospitals and that hospitals and physicians continue to provide quality care under the new payment system. This has led to considerable pressures on the practicing physician.

State peer review organizations, hospital utilization review committees, and hospital administration are looking over the shoulder of physicians, at times forcing them to discharge patients quicker than most physicians would like to discharge them. Noncompliance with these stringent requirements may result in loss of privileges at the hospital, exclusion from the Medicare program, or monetary penalties.

This presentation will review the current status of the program and will make recommendations that our membership can use to survive during these very difficult transitional times in the history of American medicine.

23

NEUTROPHIL MYELOPEROXIDASE: A MEDIATOR OF AIRWAY EPITHELIAL DAMAGE. J.R. Mohammed, B.S. Mohammed, N.R. Baker, W.B. Davis. Ohio State University, Columbus, Ohio.

We have previously shown that chronic bronchitis and cystic fibrosis tracheobronchial secretions contain high concentrations of neutrophil myeloperoxidase (MPO). Since these secretions also contain large numbers of neutrophils releasing H_2O_2, MPO in the airways has the necessary co-factors (i.e., H_2O_2 and Cl^-) to generate hypochlorous acid (HOCl) and other toxic oxygen species. In the present study we demonstrate that the neutrophil MPO enzyme system is cytotoxic for airway epithelial cells. Neutrophil MPO was purified from the granule extract of 3×10^{10} blood neutrophils by gel filtration and ion-exchange chromatography. When assessed by acid polyacrylamide gel electrophoresis and Coomassie blue stain, the final MPO preparation was a single protein band. MPO cytotoxicity was assessed in hamster tracheal ring cultures (37°C, 24 hrs) in which ciliary activity and epithelial cell damage are monitored by inverted phase microscopy. Neither purified MPO (150 ug/ml) alone or H_2O_2 (1×10^{-4} M) alone was cytotoxic for the tracheal rings. However the combination of MPO and H_2O_2 in these concentrations produced complete cessation of cilary activity and obvious epithelial damage after 24 hrs. Further experiments confirmed that the observed cytotoxicity was due to the generation of HOCl and/or other oxidants by MPO. MPO and H_2O_2 were allowed to react to produce HOCl outside the culture system. When a molar excess of catalase was added to the reaction mixtures containing HOCl, the mixtures retained their cytotoxic potential despite the removal of excess H_2O_2 by catalase. These findings suggest that the myeloperoxidase enzyme system may be one mechanism for airway epithelial damage in chronic inflammatory airway diseases.

24

COLOR ATLAS OF ENDOCRINOLOGY: Shahid Athar, M. D., Clinical Associate Professor, Department of Medicine and Endocrinology, Indiana University School of Medicine and Director, Section of Endocrinology, St. Vincent Hospital, Indianapolis, Indiana.

This is a slide presentation of interesting cases of endocrine dysfunction with a brief discussion. Cases include hyperthyroidism, hypothyroidism, thyroid cancer, acromegaly, hypopituitarism, short stature, hyperparathyroidism, Cushing's syndrome, Addison's disease, pheochromocytoma, hirsuitism, male hypogonadism, and complications of diabetes. They are based on a 12-year experience of a clinical endocrinologist. Discussion about investigations and management offered after the presentation.

25

SMALL INTESTINAL MORPHOLOGY AND ABSORPTIVE FUNCTIONS IN CASES OF ROUND WORM INFESTATION: M. R. Ajmal, M. D., Professor S. G. Tewari, M.D., D.M., and D. P. Singh, M. D.B.S., Department of Medicine, J. N. Medical College, Aligarh Muslim University, Aligarh-202001, India.

Thirty adult cases with isolated Ascaris-lumbricoide infestation and twenty healthy cases to serve as control group, were selected for this study. All these cases were subjected to intestinal absorptive functions tests which included D-xylose test and faecal fat estimation. Per oral jejunal biopsies were obtained using croseby and Kugler capsule. All these investigations were repeated 3-4 weeks following dewormification.

Mild hypoalbuminemia was found in 13.3% cases and moderate hypoalbuminemia 10% cases of study group. Serum proteins increased in all these cases following dewormification. D-xylose test was found normal in 70% cases, borderline impairment in 13.3% cases and definite impairment in 16.7% cases. In post treatment group D-xylose test was normal in 90% cases, improved in 6.6% and no change was observed in one case only. Faecal fat was found in 63.3% cases. Definite steatorrhoea was noted in 23.4% and borderline steatorrhoea in 13.3% cases. Dewormification caused normal reading in 86.6% cases, mild steotorrhoea in 10% cases while no improvement was found in one case.

Jejunal biopsy revealed minimal to moderate mucosal changes in 27% cases. Following dewormification jejunal mucosal morphology returned to normal in all cases except one case. This individual having functional and structural abnormalities was thought to be a case of tropical sprue worm infestation.

The present study indicates that Ascaris lumbricoide infestation produces a modest amount of biochemical malabsorption which is reversible following dewormification.

26

TAKAYASU'S ARTERITIS: W. D. Ahmad, M. D., 121 Edinburgh South, Suite 210, Cary, North Carolina.

A case of "Takayasu's Arteritis" is presented and findings and complications discussed. A brief overview of the history and literature of this disease is given with special reference to nosological problems - beginning with the first description of Dr. Takayasu.

In the clinical discussion special reference is made to neurologic complications and manifestations in general as well as those relating to the hemodynamic changes resulting from partial or complete occlusion of major arteries arising from the arch of the aorta.

The point made by the author is that it is erroneous to call this disease Takayasu's arteritis.

27

EFFECT OF MATERNAL-FETAL DISORDERS ON LUNG MATURATION. I. DIABETES MELLITUS. H. E. Fadel, MD, S. A. Saad, MD, G. H. Nelson, MD, PhD, H. C. Davis, MS,* Departments of Obstetrics and Gynecology and Research Computing and Statistics,* Medical College of Georgia, Augusta, Georgia.

Amniotic fluid (AF) for fetal lung maturity studies was obtained through transabdominal amniocenteses from 287 healthy and 198 diabetic third trimester pregnant women. There were 111 Class A, 58 Class B, 13 Class C, 11 Class D, 4 Class F, 1 Class R patients. We measured the lecithin phosphorus (Lec P) concentration in AF. The regression lines representing the relationship of AF lecithin phosphorus concentration (Lec P) to gestational age at amniocentesis (GAA) in each of the groups (normal, Class A, insulin-dependent, individual Classes B, C, DFR, and all diabetics) were found not to be statistically different. Each of the diabetic patients was then matched to a normal pregnant woman of the same race and sex of her newborn and GAA with additional controls for each subsequent amniocentesis. There were no differences between the regression lines in any of the diabetic groups, and their respective matched controls. Neither was there a difference in the proportion of mature Lec P at different weeks between the diabetics and the normal women. The diabetic patients were then divided into hypertensives and non-hypertensive subgroups. There were no statistically significant differences between the regression lines representing the relationship of AF Lec P to GAA of the hypertensive and non-hypertensive diabetics in any of the diabetic classes or groups (Class A or insulin-dependent).

These results indicate the absence of significant influence of diabetes on fetal lung maturation. This probably reflects the improvement in metabolic control of diabetes resulting in normalization of the fetal metabolic environment.

28

KEEPING UP IN MEDICINE:AN ISLAMIC PERSPECTIVE. Paul Mehdi Fischer, M. D., Department of Family Medicine, Medical College of Georgia, Augusta, GA 30912.

Physicians have primary control over the 11% of the Gross National Product that is spent on health care. They make decisions about access to care and which services or products are purchased. Most physicians believe that these decisions are logically based on scientific evidence and personal clinical experience. But, physicians are one of the most highly targeted market groups in the United States. The drug industry alone spends six thousand dollars per physician per year to encourage specific product use. Most of this marketing is cloaked in trappings of respectability, such as "continuing medical education".

The process by which physicians make decisions is not well studied, but it does not appear that they behave simply as "scientists" who have carefully reviewed the "evidence". On the other hand, there are data from marketing research to indicate that physicians respond to advertising of pharmaceutical products in a typical "consumer" fashion.

The integrity of the profession requires that physicians re-examine the potential influence of marketing pressures on their medical practices.

29

RECENT ADVANCES IN ANESTHESIOLOGY AND CRITICAL CARE:Benjamin M. Rigor, M. D., Department of Anesthesiology, School of Medicine, University of Louisville, Louisville, Kentucky.

There will be a presentation of the "Recent Advances in Anesthesiology and Critical Care" with emphasis on the recent developments in cerebral resuscitation and/or protection. The modern aspects of the pharmacotherapy of cerebral reanimation with the use of newer drugs such as flunarizin, lidoflazin, etc., other calcium blockers and metabolic modifiers will be discussed in detail. The advances in anesthesiology that will be presented are related to the newer requirements for adequate monitoring on the prevention of anesthetic accidents or misadventures and anesthetic mortalities. There will also be a presentation on the "Recent Crisis in Anesthesiology" which includes the unresolved malpractice situation, the anticipated excess of anesthesiologists in practice, the modification of the reimbursement of procedures related to the relative value guide in anesthesiology and the recent changes in the training programs for residencies in anesthesiology that is required by the LCGME and the American Board of Anesthesiology.

30

AIDS UPDATE: Carmelita U. Tuazon, M. D., Professor of Medicine, Director, Division of Infectious Diseases, Department of Medicine, The George Washington University Medical Center, Washington, D. C.

AIDS is caused by the HTLVIII/LAV virus which induces a profound defect in cellular immunity predisposing patients to opportunistic infections and malignancies. It has been recognized in certain risk groups including homosexuals/bisexuals, drug abusers, transfusion recipients and sexual partners. The highest incidence is reported in major cities such as New York, Los Angeles, San Francisco, Miami, Texas, and Washington, D. C.

The clinical spectrum of infections with HTLVIII/LAV ranges from asymptomatic infection (positive virus culture and or positive Ab),acute retroviral syndrome, lymphadenopathy syndrome, and symptomatic infection which includes constitutional diseases, neurological disease, secondary infectious diseases (Pneumocystis carinii pneumonia, cryptosporidiosis, toxoplasmosis, extra-intestinal strongyloidians, isosporiasis, candidiasis (esophageal, pulmonary and oral), cryptococcosis, histoplasmosis, mycobacterial infections, chronic mucocutaneous herpes simplex, PML, oral hairy leukoplakia, multidermatomal herpes zoster, recurrent salmonella bacteremia and nocardiosis), secondary cancers (Kaposi's sarcoma, now Hodgkin's lymphoma or primary lymphoma of the brain) and other conditions in HTLVIII/LAV infection.

Some of the major recent developments in AIDS research include the isolation of the HTLVIII/LAV on culture and the availability of the antibody test. Major research efforts are directed toward development of vaccine and discovery of effective antiretroviral drugs.

31

SEXUALLY TRANSMITTED DISEASE "STD"
Mahmoud A. Ismail, M.D., University of Chicago, Chicago, IL 60637

Recently STD became the topic of discussion not only in medical journals and social circles but in Newsweek and Time magazines and on T.V. shows night and day. These diseases have medical as well as social ramifications. Syndromes and end results of these diseases include death due to AIDS, infertility due to Pelvic Inflamatory Disease, increased Ectopic pregnancies due to increased incidence of Salpingitis. Men who are sexual partners of infected women develop Urethritis, Epididmytis as well as Prostatitis and decreased fertility. Newborns of affected mothers develop conjunctivitis and pneumonia as well as respiratory syndrome. Children of mothers infected with herpes genitalis may develop the same infection and some of them will die of systemic herpetic infection. Patients are advised by their physician to avoid having more than one sexual partner, especially if they are wearing an I.U.D. as a contraceptive method since it has been proven beyond doubt that multiple sexual partners is a risk factor for developing infection followed by infertility in women in general and those using I.U.D.'s for contraception in particular. The current cost of such infections to the economy of the U.S.A. is unknown. The estimated cost is 3 billion dollars for Pelvic Inflamatory Disease only, including both direct and indirect costs.

The sexual revolution caused an epidemic of such diseases and all their sequelae with all the frightening comolications of these infections, especially death. The pendulum is moving again to conservatism and the flames of the sexual revolution are fading, being replaced by the light of good reason and good health.

The Prophet "PBUH" said "any group of people where corruption has spread between them without advising each other to avoid it, will experience diseases and infections that have not been known to their predecessors."

32

NEED FOR ORGANIZED ASSISTANCE IN FOOD AND HEALTH CARE IN THE UWIN:UNION OF WORLD ISLAMIC NATIONS: A. A. Quraishi, Ph. D., Director, Scientific American Foods Company, P O Box 21531, Columbus, Ohio 43221.

Hunger and violence are menacing the lives of innocent Muslims in Asia and Africa, causing "Tumult and Turmoil", swelling the ranks of refugees and the number of mass graves. According to the United Nations High Commissioner for Refugees, there are 12.5 million refugees in the world, 10.5 million of whom are Muslims largely consisting of Afghans, Palestinians, Eritreans, Ethiopeans, Somalis, Ugandans, South Africans and Bangladeshis. The Afghans, who are the victims of Soviet aggression and blood bath since 1979, are by far the largest group, exceeding 5 million Africans facing starvation and death compounded by draught and superpower conspiracy for looting the natural resources of the Muslim lands. International aid has amounted to treating a gaping wound with band-aid. "We Are The World" fund-raiser was like a drop in the bucket. World church organizations have remained preoccupied with "saving" souls, trading with the Cross and a morsel, the indigenous faith of Islam.

Muslim Governments in general and the Arabs in particular, have turned a deaf ear to the deafening calls for help. Obviously there is a need for setting up an organization, the lack of which has weakened the morale of the Freedom Fighters in the ranks of the refugees to oust the better organized forces of Communism or Zionism. In this paper I will bring home the enormity of the problem and outline a plan of concerted action, propose an organizational structure and source of funds based on Islamic principles of cooperation, discipline, and faith and unity.

33

TOXIC SHOCK SYNDROME: Carmelita U. Tuazon, M.D., Professor of Medicine, Director, Division of Infectious Diseases, Department of Medicine, The George Washington University Medical Center, Washington, DC

In 1980, TSS was reported in epidemic proportions among young women who presented with multiple organ system manifestations with onset of symptoms during menstruation. The clinical presentation of TSS is characterized by an abrupt onset of symptoms of headache, fatigue and irritability, myalgia, conjunctivitis, diarrhea, fever as high as 40° C, abdominal pain, vaginal irritation and generalized skin rash. Later symptoms including lethargy, confusion, combativeness, hypotension and shock may occur. During convalescence desquamation of the skin is observed. Laboratory abnormalities include leukocytosis, decreased platelets, renal and liver function abnormalities.

Over 90% of cases of TSS have been related to the onset of menstruation. The incidence of S. aureus in vaginal and cervical cultures ranged from 74-97% among patients with acute menstrually related TSS. It has been clearly established that S. aureus has an etiological role and tampon usage is a definite risk factor. The identifying marker of TSS studies is its capability to produce toxin pyrogenic exotoxin C or staphylococcal enterotoxin F.

Mortality rates for TSS are reported at 8%. The recurrence rate is quite high, up to 40%.

Therapy is directed at rapid correction of hypotension with volume replacement. Antistaphylococcal antibiotics should be administered for 10-14 days. Some studies suggest that corticosteroids may be beneficial.

34

TIPS FOR SURVIVAL IN PRIVATE PRACTICE IN CURRENT MARKET PLACE: Ghulam Qadir, M. D., Chief, Department of Psychiatry, Oakwood Hospital, Dearborn, MI 48124

The current changes in the health care delivery system have been disaster for some of the physicians; while some have benefited from such changes. The survival or doom has depended upon the attitude of the physician. The author discusses the four P's of the marketing mix and how such a concept can be applied to survive in the current market place. He stresses on the good clinical skills, availability, individualized treatment and visibility as the four essential elements for successful practice. By combining the four elements he has not only been able to maintain but increase his market share.

35

VENOUS ANGIOMAS - AN UNDERESTIMATED CAUSE OF INTRACRANIAL HEMORRHAGE
Ghaus M. Malik, M.D., James I. Ausman, M.D., Ph.D.*, Department of Neurological Surgery, Henry Ford Hospital, Detroit, Michigan, U.S.A.

Venous angiomas are the most common vascular malformation in autopsy material according to McCormick. They are, therefore, considered incidental findings. Our experience, however, is significantly different in a clinical setting. Since 1975, we have treated over 125 patients with cerebral vascular malformations. Six of these patients presented with hemorrnage secondary to venous angioma, while during the same period, there were only six incidental venous angiomas observed.

Three patients had bleeding into the brainstem while two patients suffered intracerebral hemorrnage in relation to pregnancy. The sixth patient had multiple episodes of subarachnoid hemorrnage. Half of the patients did not show the abnormality on angiography. In one of the patients with pontine hemorrhage, the angioma was not removed initially, but excision was necessitated by repeat hemorrnage 18 months later.

These observations lead us to believe that venous angiomas are infrequently seen in clinical practice but these do have the potential of bleeding, and particularly rebleeding if left untreated as evidenced by two of our patients. All six cases were treated surgically with excellent results.