

## ASSOCIATION BETWEEN MELANOSIS AND INVOLVEMENT OF RESPIRATORY SYSTEM IN PATIENTS WITH CHRONIC ARSENICOSIS

Shafiqul Islam<sup>1</sup> MBBS MD; AZM Maidul Islam<sup>2</sup> MBBS DD AEL DTAE AESD&V FAAD FCPS

### ABSTRACT

**Background:** Chronic arsenicosis is a multi system disease that can affect any body system including skin and respiratory system. Skin involvements are mostly melanosis (spotted, diffuse and leucomelanosis), hyperkeratosis (simple, warty and diffuse hyperkeratosis of palm and soles) and various skin cancers. Chronic arsenicosis has been reported to produce chronic cough, broncho-pulmonary diseases and diffuse interstitial fibrosis. The present study was therefore undertaken to investigate whether any positive association exists between melanosis and respiratory system involvement in patients with chronic arsenicosis in Bangladesh; **Subjects and Methods:** This is a non-randomized case study conducted in the department of Dermatology and Venerology of Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka during July 1997 to may 1999. The study included 42 cases (sex: 29 males, 13 females; age: 7-52 years) purposively selected having skin lesions such as melanosis and/or leukomelanosis of the trunk and extremities, hyperkeratosis of the palms and sole, anaemia and others features of chronic arsenicosis who fulfilled the inclusion criteria and agreed to give informed consent. Respiratory system involvement was assessed by patient's symptoms, physical findings and by investigations; **Results:** Among the skin involvements 35 (83.33%) had melanosis, 40 (95.25%) had hyperkeratosis, 27 (64.29 %) had hyperhidrosis, 11 (26.19%) had nail abnormalities, 5 (11.90%) had hair abnormalities and 12 (28.57%) had conjunctivitis and respiratory involvement was found in 19 (45.24%) patients and include chronic rhinitis 1 (2.38%), recurrent epistaxis 1 (2.38%), chronic cough 17 (40.48%) and breathing difficulties 6 (14.29%). However no significant association was found between melanosis and respiratory system abnormalities ( $\chi^2=1.92$ ,  $P=0.105$ ) and between duration of melanosis and respiratory system abnormalities ( $\chi^2=0.288$ ,  $P>0.05$ ); **Conclusions:** Melanosis and duration of melanosis is not associated with respiratory system abnormalities in patients with chronic arsenicosis.

[J Med Coll Women Hosp 2008; 6(2): 61-66]

## AGE RELATED CHANGE TO CARDIOVASCULAR SYMPATHETIC FUNCTION ASSESSED BY BLOOD PRESSURE RESPONSE TO SUSTAINED HANDGRIP

Taslima Islam<sup>1</sup> MBBS MPhil; Noorzahan Begum<sup>2</sup> MBBS MPhil

### ABSTRACT

**Background:** Autonomic control on cardiovascular activity is modified with age. Impaired autonomic nerve functions are common features of patients suffering from cardiovascular diseases in old age; **Objective:** Blood pressure response to sustained handgrip was studied in apparently healthy elderly person to observe the influence of age on cardiovascular sympathetic activity; **Subjects & Methods:** This prospective study was conducted in the Department of Physiology, Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka during July 2005 to June 2006. For this purpose, total 90 apparently healthy adult subjects, 30 young adults with age ranged from 21-30 years (control) and 60 elderly with age ranged from 51-70 years (case), were selected from slum area of Malibag wireless gate and from BSMMU staff quarter, Paribag, Dhaka. Sympathetic nerve function status of all subjects were assessed by blood pressure response to sustained handgrip. For statistical analysis, one way ANOVA (Post Hoc Test) and Pearson's correlation co-efficient test were done; **Results:** Mean ( $\pm$ SD) rise in diastolic BP (mmHg) after sustained handgrip was  $20\pm 2.75$  in 21-30 years age group,  $18 \pm 3.90$  in 51-60 years age group and  $18 \pm 2.89$  in 61-70 years age group and was significantly ( $P<0.05$ ) lower in both elderly age groups compared to that of adults and 'r' value of rise in diastolic BP with age was  $-0.246$  and was statistically significant ( $P<0.01$ ). **Conclusion:** It was concluded that aging process substantially impairs cardiovascular sympathetic functions.

[J Med Coll Women Hosp 2008; 6(2): 67-70]

## LIPOPROTEIN(a) STATUS IN BANGLADESHI PATIENTS WITH DIABETES MELLITUS

ASM Giasuddin<sup>1</sup> MSc PhD DImmunol CSciFIBMS; KA Jhuma<sup>2</sup> MBBS Mphil;  
AM Mujibul Haq<sup>3</sup> MBBS MPhil FRCP MRCP FCPS

### ABSTRACT

**Objective:** Plasma/serum level of lipoprotein(a) has been reported to be elevated and associated with long term complications in patients with diabetes mellitus (DM). As the literature search has indicated that no studies were done or reported from Bangladesh, the present study was conducted on serum Lp(a) levels in Bangladeshi patients with DM (DMPs); **Patients & Methods:** Serum Lp(a) levels were measured by immunoturbidimetric method in diagnosed DMPs (n: 37; sex: 23 males, 14 females; age range: 14-75 years, mean age  $\pm$  SD: 51.4  $\pm$  19.2 years) and compared with normal control subjects (NCs) (n: 30; sex: 18 males, 12 females; age range: 30-60 years, mean age  $\pm$  SD: 45.2  $\pm$  12.2 years); **Results:** Mean serum Lp(a) level was elevated in DMPs compared with NCs [NCs vs DMPs  $\rightarrow$  (Mean  $\pm$  SD, mg/dl): 21.27  $\pm$  8.16 vs 45.42  $\pm$  20.17, P<0.001]. Also, larger number of DMPs had higher Lp(a) levels compared with NCs (NCs vs DMPs:  $\chi^2 = 11.5984$ , P<0.001); **Conclusion:** Being consistent with some reports in the literature on other populations, our findings were discussed accordingly about the possible role of Lp(a) in atherosclerosis and hence involvement in the long term complications such as retinopathy, nephropathy and future coronary events in DMPs.

[J Med Coll Women Hosp 2008; 6(2): 71-77]

**EDUCATIONAL STATUS AND SOCIO-ECONOMIC CONDITION OF THE PATIENT AFFECTING THE PRESCRIBING PATTERN OF NON-STEROIDAL ANTI-INFLAMMATORY DRUGS AT OUTPATIENT DEPARTMENTS OF TEACHING HOSPITALS**

**Md. Shamsur Rahman**<sup>1</sup> MBBS MPhil; **Zinnat Ara Begum**<sup>2</sup> MBBS MPhil; **Noor-E-Tabassum**<sup>3</sup> MBBS MPhil; **Sudhira Begum**<sup>4</sup> MBBS MPhil; **Abu Syed Md. Mosaddek**<sup>5</sup> MBBS MPhil

**ABSTRACT**

**Objectives:** The main objective of the study was to obtain information regarding the effects of educational and socio-economic status of the patients on the prescribing pattern of non-steroidal anti-inflammatory drugs (NSAIDs) by the qualified medical personnel in the outpatient departments (OPDs) of three selected medical college hospitals in Dhaka city. **Patients & Methods:** A total of 120 selected patients attending the OPDs were interviewed using a questionnaire. Again 600 prescriptions containing NSAIDs were collected, photocopied and later analyzed. **Results:** Educated and higher income group of patients mostly attended in a private medical college hospital (PH) whereas less educated and lower income group of patients generally attended Dhaka Medical College Hospital (DMCH) and Bangabandhu Sheikh Mujib Medical University Hospital (BSMMUH), Dhaka. Analgesics with no or minimal anti-inflammatory effects became the most commonly prescribed NSAIDs in the medical OPDs of DMCH and BSMMUH. On the contrary, analgesics with potent anti-inflammatory effects became the most commonly prescribed NSAIDs in PH. The number of patients taking NSAIDs before coming to hospital was more in PH compared to DMCH and BSMMUH. They were influenced by salesman, friends or relatives and doctor's advice given previously. **Conclusion:** It may be mentioned that overall prescribing pattern of NSAIDs among three hospitals is rational.

[J Med Coll Women Hosp 2008; 6(2): 78-83]

## ACID VIOLENCE IN BANGLADESH

F Zafreen<sup>1</sup>, MBBS MPH; MN Islam<sup>2</sup>, MBBS MPH; MA Rahman<sup>3</sup>, MBBS DPH MPhil PhD

### ABSTRACT

**Objectives:** A total number of 90 (ninety) survivors, both old & new cases were selected purposively in the study to determine their socio demographic characteristics, treatment seeking pattern and the legal and rehabilitation status and also to identify the possible causes and the perceived perpetrators; **Materials & Methods:** This descriptive cross sectional study was carried out in National Institute of Preventive & Social Medicine (NIPSOM) from January to June 2003 on acid victims', who were admitted in Dhaka medical college hospital (DMCH) and who were present in Thikana & Jibon Tara of Acid Survivors Foundation (ASF); **Results:** Victims' age range was 01 to 50 years and Mean  $\pm$  SD of age were  $20.03 \pm 8.83$  years. 90% (81) of the survivors were female, 58.9% (53) were adolescent, 92.2% (83) survivors were Muslim, 60% (54) were unmarried, 53.3% (48) were below secondary level educated, 51.1% (46) were student & 32.2% (29) were housewife by occupation. 69% (62) survivors' were from semi-urban area and 40% (36) from Dhaka Division and 62.2% (56) victims' had monthly family income  $\leq$  5,000/- taka. 54.4% (49) causes were due to various refusals & 14.4% (13) were due to dowry, 64.4% (58) perpetrator was rejected suitor & 16.7% (15) were husband. 80% (72) incidences were occurred at home and 93.3% (84) occurrences were at night time. 91.1% (82) victims' received threat before the incidence and 52.3% (33) filed GD in local police station before the occurrence. 78.9% (71) survivors had no knowledge about acid, its source & its consequences before the incidence. 71.1% (64) victims' were affected at face, 54.4% (49) received immediate first-aid treatment, 85.6% (77) received surgical treatment and 62.3% (56) required reconstructive surgery, 98.9% (89) survivors filed police case, 82% (73) cases were under trial, among the verdict received 81.3% (13) perpetrator got life time imprisonment. Only 48.9% (44) survivors were rehabilitated among them 56.5% (25) provided with various type of jobs; **Conclusion:** This study depicts the national scenario of the characteristics and status of acid victims; therefore we hope that this study would be beneficial to the policy makers to develop strategy to combat the problems of acid violence.

[J Med Coll Women Hosp 2008; 6(2): 84-90]

## ANTIOXIDANT ACTIVITIES OF DITHIOL ALPHA-LIPOIC ACID

Noor-E-Tabassum<sup>1</sup>, M.BBS M.Phil

### ABSTRACT

Alpha-lipoic acid, a dithiol compound derived from octanoic acid, which acts as a coenzyme for several redox reactions in almost all the tissue of the body. It retains its protective functions in both oxidized and reduced forms. Alpha-lipoic acid reduces oxidative stress by redox generation of other antioxidants such as vitamin C, E and increasing the intracellular glutathione. Exogenous alpha-lipoic acid has been shown to increase ATP production due to its role in the oxidation of pyruvate and alpha-ketoglutarate in the mitochondria. Alpha-lipoic acid administration has been shown to be effective in preventing pathology in various experimental models in which reactive oxygen species have been implicated.

[J Med Coll Women Hosp 2008; 6(2): 91-96]

## **CASE REPORT**

# **MEDICOLEGAL, LEGAL AND SOCIAL ISSUES IN A CASE OF HANGING**

**M Monowarul Islam Sarker<sup>1</sup>**, MBBS MCPS DFM; **Kh A Karim<sup>2</sup>**, MBBS MCPS DFM;  
**M Fazlul Karim<sup>3</sup>**, MBBS MCPS DFM

### **ABSTRACT**

Death due to hanging is one of the common methods of suicide. We report here a 19 years old female who committed suicide by hanging from ceiling fan with orna round her neck. The victim girl was unmarried and emotional. Repeated failure in examination, dependent upon others and teased by them made her more emotional and she could not balance herself and committed suicide by hanging. Medicolegal autopsy was done at Dhaka Medical College Morgue to confirm the cause, mode and manner of death. Medicolegal, legal and social issues needed to be considered in case of hanging are discussed.

**[J Med Coll Women Hosp 2008; 6(2): 97-100]**

## **FIXED DRUG ERUPTION CAUSED BY PARACETAMOL IN A 4 YEAR OLD CHILD**

**Shafiqul Islam**<sup>1</sup>, MBBS MD; **KA Karim**<sup>2</sup>, MBBS DDV MSSVD; **MN Islam Bhuiyan**<sup>3</sup>, MBBS DDV

### **ABSTRACT**

Drug reactions are common cause of dermatological consultation. Prevalence rate varies from 0.5 to 3 per 100 persons. Fixed drug eruption (FDE) normally presents as single or multiple sharply demarcated erythematous plaques that recur at the same site upon re-exposure to the offending drug. When the inflammation subsides, it often leaves residual hyperpigmentation. Commonly implicated drugs are non steroidal anti inflammatory drugs (NSAIDs), phenolphthalein, barbiturates, sulfonamides, tetracyclines and salicylates. Paracetamol (acetaminophen) is a widely used analgesic-antipyretic with consistent safety profile and very low incidence of side effects. Despite its frequent uses, drug eruption especially FDE due to paracetamol is extremely rare. Here we report a childhood case of FDE caused by paracetamol. Our patient, a 4 year old girl, had developed multiple painfull red to dusky red erythematous plaque with few bullae, erosion and target like lesions on her limbs, trunk, face and erosions on oral and genital mucosa within 24 hours of taking paracetamol.

**[J Med Coll Women Hosp 2008; 6(2): 101-103]**