Snake bite is a common medical emergency with high incidence in rural areas. The experience gained from 273 snake bite cases will be discussed. This is a prospective study done over 8 years in 3 different hospitals - Panagarh, Secunderabad and 162 MH. Eighty-eight were poisonous bites. The vasculotoxic and nephrotoxic features were seen in 45 cases and neurotoxic features were seen in 49 cases. Anti-snake venom (ASV) was given on ascertaining definite indications. ASV hypersensitivity was not done in any case. ASV 6-8 vials were given in mild cases and 10 vials were given in severe cases initially followed by 2-3 vials 4-6 hrs. Type I - ASV reactions were seen in 4 cases. Type II in 3 cases. In neurotoxic bites recovery was complete without any sequelle. Endotracheal intubation with manual ventilation was given in all 15 cases of respiratory paralysis as there was no facility for mechanical ventilation in Panagarh. There were 3 deaths in neurotoxic group. Neostigmine and atropine combination was given in all cases of neurotoxic bites. Out of 24 cases of acute renal failure (ARF), 19 were oliguric and 5 were non-oliguric. Eleven patients underwent dialysis. Six deaths were due to ARF. One case died of intra-cerebral bleed. ASV should be given at the earliest in all cases of poisonous snake bites to prevent respiratory paralysis and ARF, neostigmine and atropine combination should be given in all cases with neurotoxic features. Supporting treatment for hypotension, shock, wound debridement and skin grafting also play a vital role.

278 An Interesting Case of Rhabdomyolysis with Acute Renal Failure

Jayachandran K, Saravanan T, Mathew Thomas
PSG Institute of Medical Sciences and Research, Coimbatore.

19 year old patient was admitted with weakness and pain in the lower limbs, oliguria, brownish urine of 3 days duration. He had consumed 200 ml of hair dye (Supervasmol) with suicidal intention 3 days ago. Clinical examination revealed a conscious, well oriented patient with grade 4/5 proximal muscle weakness in lower limb. Investigations revealed normal CBC, blood sugar, serum calcium, phosphorous, bilirubin, proteins and serum electrolytes. Urine examination showed albuminuria and myoglobinuria. Serum CK 47620 U, LDH 1021 U, SGPT 1810 U/L, SGOT 6850 U/L, blood urea 267 mg%, serum creatinine 8.3 mg%. X-Ray chest and ECG were normal. A diagnosis of rhabdomyolysis, myoglobinuria with acute renal failure due to hair dye toxicity was made. Paraphenylenediamine is the principal ingredient of supervasmol which has produced rhabdomyolysis, myoglobinuria and renal failure. Another ingredient propylene glycol is responsible for hepatic damage. He underwent five hemodialysis sessions and completely recovered from renal failure within 3 weeks. The enzymes returned to normal levels.

279 A Case of Uncommon Poisoning - Cardiotoxicity of Tri-cyclic Anti-depressant Poisoning

Thakkar PV, Bhuiriya RS, Bhula Shaila, Amin BK, Saiyad AM, Shewkani MR
B.J. Medical College, Civil Hospital Campus, Ahmedabad.

A 35 years old female was brought to casualty with unconsciousness. There was no past history of any major illness. On presentation she was hypotensive with systolic BP of 60 mm of Hg. She had bilateral dilated pupils. Her random blood sugar and serum electrolytes were normal. Analysis of her arterial blood gases showed acidosis with pH 7.0. which was predominantly of metabolic origin. Her electrocardiogram was suggestive of torsades de pointes. Other emergency investigations were normal.

On detailed inquiry relatives informed that probably she had taken 100 tablets of nortryptiline which she was taking irregularly for psychiatric illness. Due to lack of facilities her serum nortryptiline level was not done though her gastric lavage sample was sent for analysis. Relevant Management: She was managed according to standard life support algorithms. She was transferred to intensive care unit and was placed on ventilatory support. She received increments of sodium bicarbonate. She was extubated after 24 hours and was transferred to ward on 3rd day. She was discharged after 10 days.

Conclusion: Common poisoning in India is organophosphorus and other drugs (e.g. diazepam). Nortryptiline poisoning is relatively rare. Tricyclic antidepressant toxicity should be considered in management of unconscious patient with arrhythmias. The cardiac toxicity of tricyclic anti-depressant is a consequence of quinidine like effects on the sodium channels in the heart cardiac arrhythmias is the principle cause of death following over dose.

280 Ethylene Dibromide Poisoning in Uttarakhand

Gupta Abha, Varma Amit, Kothari RP
Himalayan Institute of Medical Sciences, Swami Rama Nagar, Dehradun, Uttarakhand.

Aim: To study the clinical profile of ethylene dibromide (EDB) in Uttarakhand region and the effect of treatment.

Introduction: EDB poisoning is fast emerging as an epidemic and would soon surpass aluminum phosphide and other such agents. It was introduced initially in the production of dyes and pharmaceuticals and fire extinguisher. It is used as a potent insecticide, fumigant for grains, vegetables and fruits. Because of its colorless nature, very faint odor and very high lethal toxicity, it has gained favor as a suicidal and homicidal agent besides being exposed accidentally. The present study was aimed at studying the clinical spectrum of this poisoning and the effect of treatment.

Material and Methods: The study was conducted at Himalayan Institute of Medical Sciences, Swami Rama Nagar, Dehradun and included 18 consecutive patients attending the medicine emergency and outdoor department. Their clinical manifestations and the investigations were analyzed on the basis of their time of appearance.

Results: Out of the 16 patients studied 4(25%) presented with altered sensorium, 6 (37.5%) with abdominal pain, nausea and vomiting, 8(50%) had hypotension at the time of admission, 10 (62.5%) had renal involvement in the form of oliguria and hematuria with deranged renal functions and 15 (93.75%) had deranged liver functions. 1(6.25%) had ECG changes in the form of ST-T changes. Nausea and vomiting appeared on the day-1, Renal involvement became apparent as early as day one, however majority had it on D2-D4. The liver involvement was apparent from the D1 and gradually worsened with time. Liver enzymes in thousands were not uncommon.
**281 Corrosive Ingestion: A Study of Acute Complications in 35 Patients**

Shiva Kumar S, Rajan SK, Jayanthi V, Doss Madhu Prabhu CR
Govt. Stanley Medical College and Hospital, Chennai - 600 001.

**Aim:** To study the acute complications of corrosive poisoning.

**Material and Methods:** Patients who were admitted between August 2000 and November 2002 in IMCU, Govt. Stanley Medical Hospital due to corrosive ingestion were studied and their name, age, sex and quantity, type and physical properties of corrosives noted. General systemic ENT examination and the following clinical parameters like oral lesions, sore throat, choking in throat, hoarseness of voice, stridor, odynophagia, chest pain, heart burn, dysphagia, aspiration, regurgitation, gastrointestinal bleed, cough after meal, abdominal pain, abdominal distention, skin lesion, laryngeal edema and subcutaneous emphysema were studied and necessary investigations were also done. The patients who got admitted with corrosive ingestion in our hospital were given supportive treatment in the form of IV fluids, inj. ranitidine and mucosal protectants like sucralfate. Antibiotics were given in suspected perforation. Systemic steroids were given for laryngeal stridor or respiratory embarrassment. These patients had an UGI endoscopy within 48 hours of admission to IMCU depending on the general condition of the patients, and the extent of injury to the oesophagus and stomach were noted. The endoscopic findings were graded according to Zargar’s classification.

**Grade**

<table>
<thead>
<tr>
<th></th>
<th>Normal</th>
<th>Edema and hyperemia of the mucosa</th>
<th>Friability, hemorrhages, erosions, blisters whitish membranes, exudates and superficial ulcerations</th>
<th>Multiple ulcerations and areas of necrosis</th>
<th>Small scattered areas of necrosis</th>
<th>Extensive necrosis (Areas of brown - Black or growth discolorations were taken as evidence of necrosis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>0</td>
<td>I</td>
<td>IIa</td>
<td>IIb</td>
<td>IIIa</td>
<td>IIIb</td>
</tr>
</tbody>
</table>

**Summary of Results:** Among 35 patients with acute corrosive ingestion, mean age was 28.4 years. There were 19 males and 16 females. The clinical features in this group of 35 patients were studied as follows:

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Numbers Present</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dysphagia</td>
<td>34</td>
<td>97.1</td>
</tr>
<tr>
<td>Oral lesions</td>
<td>32</td>
<td>91.4</td>
</tr>
<tr>
<td>Sore throat</td>
<td>32</td>
<td>91.4</td>
</tr>
<tr>
<td>Odynophagia</td>
<td>27</td>
<td>77.1</td>
</tr>
<tr>
<td>Heart burn</td>
<td>26</td>
<td>74.3</td>
</tr>
<tr>
<td>Hoarseness</td>
<td>24</td>
<td>68.6</td>
</tr>
<tr>
<td>Abdominal Pain</td>
<td>24</td>
<td>68.6</td>
</tr>
<tr>
<td>Choke</td>
<td>23</td>
<td>65.7</td>
</tr>
<tr>
<td>Gastrointestinal bleed</td>
<td>20</td>
<td>57.1</td>
</tr>
<tr>
<td>Skin lesions</td>
<td>20</td>
<td>57.1</td>
</tr>
<tr>
<td>Stridor</td>
<td>18</td>
<td>51.4</td>
</tr>
<tr>
<td>Chest pain</td>
<td>18</td>
<td>51.4</td>
</tr>
<tr>
<td>Laryngeal edema</td>
<td>18</td>
<td>51.4</td>
</tr>
<tr>
<td>Aspiration</td>
<td>16</td>
<td>45.7</td>
</tr>
<tr>
<td>Cough with meal</td>
<td>2</td>
<td>5.7</td>
</tr>
</tbody>
</table>

Corrosive acid was the commonest one ingested. 88.6% ingested corrosive with suicidal intention. Dysphagia (97.1%) was the commonest symptom. Twenty patients (57.1%) had GI bleed and 18 patients (51.4%) had laryngeal edema. None had perforation or subcutaneous emphysema. Nine patients died (25.7%) and all of them had stridor and 4 had gastro intestinal bleed. Four patients underwent tracheostomy for laryngeal edema and airway obstruction. Twenty-six patients had endoscopy in acute phase and grade I, II and III esophageal injury were noted in 7.7%, 30.8% and 46.2% respectively. Laryngeal edema occurred in 75% of the patients with grade III esophageal injury. GI bleed were noted in 83.3%, 62.5% and 50% of the patients with grade III, II and I respectively. 69.2% and 65.4% of the patients had diffuse injury of esophagus and stomach respectively.

**Conclusions:** 1) Corrosive acid was the commonest corrosive ingested. 2) Dysphagia was the commonest symptom (97.1%). 3) Laryngeal edema (51.4%) and GI bleed (57.1%) were the major acute complications. 4) Laryngeal edema (75%) and GI bleed (83.3%) were the commonest complications in patients with grade III esophageal injury. 5) The mortality in acute phase (25.7%) was due to airway obstruction. 6) Upper GI endoscopy within 48 hours of ingestion of corrosive is safe and effective to assess the gradation of injury. 7) Routine ENT examination to assess airway is essential.

**282 Poisoning From Organophosphorus - A Bankura Experience**

Adhikary Lipika, Dasgupta Somnath, Chaudhuri Sekhar
B.S. Medical College, Bankura

**Introduction:** Poisoning from organophosphates (OP) account for the great majority of life threatening self poisoning in our country.

**Aim:** To study the clinical features and its relationship to outcome of OP poisoning.

**Material and methods:** Ninety-eight consecutive patients aged > 8 yrs. with H2O poisoning from OP, admitted in B.S. Medical College, Bankura in 2003, were included in this study. Clinical history, physical examination and relevant investigations were done.

**Results and analysis:** Females predominated (70%) and 60% were < 30 yrs. of age. Cholinergic features were present in all. 15% had altered sensorium and 10% had fasciculations. Overall mortality rate was 15% and most deaths were within 6 hours of hospitalization. Interventional delay of > 2 hours was associated with higher mortality (56%). Those with altered sensorium and fasciculations had the worst prognosis (Mortality 73%). Since larger amount of poisoning was treated with higher doses of atropine, it was also implicated with higher mortality rate (75%).

**Conclusion:** OP poisoning is more common in females. Those presenting late and with altered sensorium and fasciculations have a much poorer prognosis.

**283 A Clinical and Biochemical Evaluation of Organophosphate Poisoning with Special Reference to Need for Ventilatory Support**

Murthy Sreenivasia L**, Srinivasprabhu NC*, Balraj KP**, Poornachandra MV
Dr. Ambedkar Medical College*, Kempegowda Institute of Medical Sciences, Bangalore.

**Objective:** The aim of the study is to determine the clinical and biochemical parameters in OP poisoning which help to predict the need for ventilatory support and to study morbidity and mortality associated among the type of OP compound consumed.

**Methods:** Fifty patients fulfilling inclusion criteria who were admitted to Kempegowda institute of medical sciences were randomly selected between September 1999 to August 2001. Each patient enrolled for study underwent a detailed clinical examination as per proforma; all patients were given a stomach wash. Thereafter a bolus dose of atropine was administered till signs of atropinization appeared, followed by one gram of pralidoxime. All patients were closely monitored and assessed 12 hourly till recovery. Ventilatory support was considered in patients with apnea, persistent cyanosis, persistent tachypnea, deranged arterial blood gases (ABG) viz. PaO2 <60mm of Hg, PCO2>55 mm of Hg. The other biochemical investigations were appropriately done for individual cases.

**Results:** Out of 50 patients maximum affected age group was between
21 to 30 years (46%), males predominating (66%) among them and affecting labor class (50%). The most common poisoning was due to methyl parathion followed by fenithrothion (tik 20). Vomiting and salivation were common symptoms while miosis and respiratory insufficiency were the common signs. The need for ventilatory support was more in patients who presented to hospital late (more than 4 hours) for specific therapy, with lesser Glasgow coma scale. Similarly, in the present study lesser the pupillary size greater was the requirement of ventilatory support. Also patients with generalized fasciculations. Patients requiring more bolus dose of atropine to produce atropinisation were prone for ventilatory support. Lower levels of pseudocholinesterase resulted in early requirement of ventilatory support. Also a new grading system proposed revealed that severe the grade of poisoning higher was the risk for ventilatory support.

Conclusion: Grading of the degree of OP poisoning taking certain parameters into consideration can help to identify high risk patients who merit admission to intensive care unit and so to prevent to decrease complications of OP poisoning.

284 Prolonged Coagulopathy Following Snake Bite Envenomation

Shashiraj E, Vidy Krishna
Department of Emergency Medicine, St. John’s Medical College Hospital, Bangalore.

Introduction: Although coagulation abnormalities following snakebite envenomation have traditionally been considered transient, but they can persist for a longer time or recur later inspite of treatment with anti-snake venom (ASV).

Objective: To study the clinical profile and implications in patients of snake bite envenomation who had prolonged coagulopathy i.e., coagulation abnormalities (prolonged PT or APTT, thrombocytopenia) lasting for more than 24 hours after the bite

Methods: This is a retrospective review of hospital records of all patients admitted with history of suspected snake bite during 2000 - 2002. Patients with coagulopathy lasting for more than 24 hours were studied in detail.

Results: Out of 64 patients who had evidence of envenomation, 33 (51.5%) had coagulation abnormalities. Among them, 25 (75.7%) had prolonged or late coagulopathy 2 to 16 days after envenomation. Male to female ratio was 2:1. Mean age was 30.48 years (range 5-60 years). Thrombocytopenia occurred in 10 (45.5%) patients No patient experienced significant spontaneous bleeding. One patient presented with epistaxis and prolonged APTT 16 days after snake bite and improved after administration of the ASV. Neurotoxicity was observed in 9 patients. Eighteen patients recovered, 5 patients were discharged against medical advice, and 2 patients expired.

Conclusions: Prolonged or late coagulopathy may occur after snake bite envenomation. Patients with coagulopathy should undergo periodic monitoring upto 2 weeks after snakebite.

285 Clinical and Socio-demographic Profile and Associated Factors in Attempted Suicidal Poisoning in Kashmir Valley in a General Hospital Setting.

Khan GQ, Kundal DC, Hassan G, Tak Shahid, Kak Manish
Department of Medicine, Government Medical College and Associated SMHS Hospital, Srinagar, Kashmir.

The study was conducted in 276 (116 male and 160 female) cases admitted to the SMHS Hospital, Srinagar from October 2000 to June 2002. Majority of the patients belonged to the age group of 14 to 29 years (60%) of whom 36.9% were females. Majority of the poisoning cases (93.1%) belonged to Muslim community. Unmarried people (63.7%) were mostly affected compared to those who were married, divorced or separated. The suicide rate was more in the low socio-economic, illiterate, unemployed rural people compared to the urban. Organophosphorus poisoning was the most common method of attempting suicides and psychiatric disorders especially major depression and post-traumatic stress disorders were the main psychiatric illness provoked by the prevailing turmoil. On analyzing the data retrospectively, it was found that the suicide rate due to poisoning has tremendously increased to 10% compared to 1% in the pre-turmoil period. It is concluded that the solution of the presently existing turmoil will expectedly bring down the rate of stress disorders and suicidal attempts in Kashmir Valley.

Radiology / Imaging

286 Screening Mammography in Women Above 40 Years

Ganjoo RK, Chander BN, Subramanya H, Kudesia S, Shukla A
Air Force Central Medical Establishment, New Delhi - 110010.

Introduction and object of the study: Breast carcinoma is the most frequent cancer in women. The American Cancer Society and the American College of Radiology, both recommend a baseline mammogram between 35 and 40 years, with a mammogram every year or two from 40 to 49 years and an annual mammogram thereafter. This study was undertaken to evaluate the value of screening mammography in Indian women.

Methodology: In this study 1875 asymptomatic women above 40 years age, underwent screening mammography over a four year period between 1996 - 2001. The screening mammography of both breasts (mediolateral and craniocaudal views) performed on a GE mammography machine. The cases which showed distortion of architectural pattern, nipple abnormalities, abnormal calcification or fibrocystic/nodular opacities were additionally subjected to sonomammography.

Those cases which fell within Category 2 to 5 of the Breast Imaging Reporting and Data Systems (BI-RADS) were subjected to fine needle aspiration cytology (FNAC), under ultrasound guidance.

Results: Of the 1875 cases studied 1718 (91.63%) were in the age group 40 -49 years while 157 (8.37%) were above the age of 50 years. Screening mammography has a definite role and is indicated for early detection of occult malignancy in women above 50 years age and aids the in diagnosis of benign mammopathies in the younger age group.

Conclusions: Screening mammography has a definite role and is recommended for early detection of occult malignancy in women above 50 years age and aids the in diagnosis of benign mammopathies in the younger age group.

287 Ultrasonographic Renal Parameters in Madurai and Around

Chandramohan M*, Vivekananthan SC**, Rajasabai N***, Lalitha S*****, D. Sivakumar***
*Kamarajar Liver Hospital, **Madurai Medical College, ***Sakthi and ****Clini Scan, Madurai.

We ultrasonographically assessed the renal parameter by coronal scan; keeping the subjects in lateral position; of all routine screening subjects