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CEREBRAL PALSY: THE GROWING CHALLENGE TO PAEDIATRIC NEUROLOGISTS

Wahed MA

Cerebral Palsy (CP) is a term that describes a group of conditions. This mainly causes movement disorder due to damage or faulty development in a part of the developing brain which usually occurs around birth process[1]. There has been no change in the prevalence of CP rather it is increasing day by day as many of the dying newborn baby survives due to improved or intensive care[2]. It is an important cause of disability in under-five children with loss of working hours, mental and physical exertion as well as anxiety of the parents[3,4].

There are two main risk factors of CP among many of them. The one is perinatal asphyxia and the other is LBW[2,5,6]. Both of these are very much common in neonatal/perinatal period in our country. Because only about 18% deliveries are conducted by trained birth attendants and 88% deliveries take place in home. The risk factors are usually not detected. As a result, there is difficult labor and newborn babies suffer form perinatal asphyxia. Again almost 70% child bearing women suffer from various types of malnutrition and give birth to LBW babies. In a tertiary care hospital, two-third of all admitted cases of neonates were suffering from these two conditions. This is an indirect magnitude of the above scenario[7].

There are various types of CP but the most common in spastic type. Here the muscles are rigid and stiff in one or more limbs and the child cannot walk, move, talk, eat or play like normal peers[8]. It becomes very painful to mothers when a peer of same age in the surrounding environment can sit, walk or run. Then the parents seek medical advice. The management of CP is multidisciplinary such as drug therapy, surgical treatment, orthosis, speech therapy, psychotherapy etc. but the main stem is physio/occupational therapy though none is curable. Physiotherapy can modify the spasticities but cannot eliminate. The mild to moderate spasticities are improved by physiotherapy but severe cases need prolonged period to improve. Some cases even deteriorate as the child becomes older due to permanent contracture of muscles. Paediatricians advise mothers for physiotherapy. Many of the mothers attend the therapy centers. After attending several times, many of the children do not improve according to their expectation, then the parents loose confidence to the therapy and they discontinue attending the therapy center. Then they ask the attending physician about the prognosis. But it is very difficult to place a pleasant answer to mothers. Again many of the mothers discontinue therapy due to inability to bear the cost of the treatment as this is still a costly therapy[9]. This attitude of parents poses the child to become more crippled.

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Moreover, many of the patients suffering from CP have associated problems such as learning, hearing and visual problems as well as epilepsy[2,8]. In CP, most of the epilepsies are multidrug resistant and difficult to cure. Parents become economically exhausted by bearing the cost of the treatment. Though Physiotherapy centers are now available in every District, speech therapy and hearing aids are not available which are still capital based and out of economic capability. Orthopaedic/prosthetic treatment is also not easily available. So, providing complete care becomes difficult.

Another question frequently asked by the mothers is aetilogy of CP. Though most of the risk factors of CP are modifiable, it will take a long time to change or improve the socio-medical factors which is a reality in our country. Because it involves political commitment, target based well run programme and involvement of NGOs and civil societies.

Finally it can be said that it is really a challenging task to Paediatricians to mange the patients as well as to satisfy the parents. On the other hand, most of the risk factors are preventable and Paediatricians should involve themselves in preventive programmes.

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ASSOCIATION OF SERUM B_{12} LEVELS AND PERIPHERAL NERVE CONDUCTION ABNORMALITIES IN TYPE-2 DIABETES MELLITUS (DM)

Israt S[1], Arifin MS [2], Sharif MM[3], Alam A[4], Rahman MA[5]

Abstract: This analytic case control study was carried out over a period of 1 year to explore the association of serum B_{12} levels and peripheral nerve conduction abnormalities in type-2 Diabetes Mellitus (DM) taking into account the possible confounders like age, BMI and glycemic status. A total number of 33 diabetic patients with peripheral neuropathy and 22 diabetic controls without peripheral neuropathy were enrolled on basis HbA_{1c} in this study. DM was diagnosed on basis of World He alth Organization criteria (1997) and diabetic neuropathy was diagnosed by electro-physiology. Serum vitamin B_{12} levels were significantly higher in the Diabetic with neuropathy (DN) group as compared to the Diabetic without neuropathy (non-DN) one. On simple correlation, in the two separate groups, vitamin B_{12} did not show any significant association with any of the nerve conduction parameters. However, there was a significant association of vitamin B_{12} with Median Distal Latency [Mud Latency ($p=0.016$)], Peroneal Nerve Conduction Velocity [PNCV (=0.012)], Sural Distal Latency [Sud Latency (=0.037)] and Sural Sensory Nerve Action Potential [SSNAP ($p=0.051$)] when all the subjects were pooled as a Diabetic group. On logistic regression analysis the DN showed significant positive association ($p<0.001$) with serum vitamin B_{12} when the effects of age and Body Mass Index (BMI) were adjusted. On multiple regression, vitamin B_{12} status was found to have significant association with Mud Latency ($p=0.038$), PNCV ($p=0.005$) and SSNAP ($p=0.045$). It was concluded that serum B_{12} levels had an association with neuropathy type-2 DM subjects and the vitamin seems to affect the Mud Latency, Sud latency, PNCV and SSNAP parameters of the Nerve Conduction Velocities (NCVs). *Prime Medical Journal 2011; 1 (2): 3-5.*

Key words: Serum B_{12} level, Type-2 DM, peripheral nerve conduction abnormalities.

Introduction:

Diabetes is a heterogeneous group of disorder which develops when the body does not produce enough insulin or cannot use it properly[1,2]. World Health Organization predicts that the world wide incidence of DM will be doubled from 150 million (2010) to 300 million in 2025.In absence effective the trend of DM with its complication is increasing rapidly[3].

Among the microvascular and macrovascular complications Diabetic Neuropathy is one of the important complication as because it invites some other complications of DM. Prevalence rate of Diabetic Neuropathy are sparse and virtually it is impossible to obtain the real picture from the vast DM population and several reports reveal a wide range of prevalence ranging from 0 – 93%[4]. Pirat et al[5], 1978 reported that 10% patient had Diabetic Neuropathy at diagnosis. Thiamin, Riboflavin, Pyridoxin, Cobalamine (B_{12}) and Tocopherol have been proved to maintain the normal integrity of neuron. Among these Cobalamine (B_{12}) plays the important role. Considering this matter DM patient is frequently prescribed with Cobalamine (B_{12}) in

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thr form of B-complex. Data from some trials have shown Pyridoxin and Cobalamine (B_{12}) had some effect on peripheral neuropathy with difficult conflicting conclusions but there is no evidence of association of serum B_{12} levels and and Diavetic neuropathy. So this present study was attempt explore the association of serum B_{12} levels and peripheral nerve conduction abnormalities in type-2 Diabetes Mellitus (DM) taking into account the possible confounders like age, BMI and glycemic status.

Methodology:

This case control study was carried out in the department of Biomedical Research Group Laboratory in collaboration with Department of Neuromedicine, BIRDEM over a period of one year enrolling a total number of 33 diabetic patients with peripheral neuropathy and 22 diabetic control without peripheral neuropathy (Case and Control were selected on basis of HbA_{1c} level) excluding pregnant subjects, diabetic with acute complication and subjects with chronic illness. After taking proper informed consent fasting blood glucose, BMI and Serum B_{12} level (Immulite analyzer) were measured. Nerve conduction velocity was measured by standard EMG machine in room with a temperature of 37°C. Data were analyses by SPSS (v. 10) and expressed as Mean (±SD). Comparison between was done by independent t-test. Multiple regression analysis was done to better assess the relationships within the variables. Simple correlation was done to find out relation between two variables.

Result:

It was observed that mean (±SD) FBG was 10.76±4.72 in DN and 10.95±5.21 mmole/l in non DN subjects respectively. Mean (±SD) HbA_{1c} was 8.60±2.11 and 8.09±2.38 in DN and non DN subjects respectively. Regarding Serum B_{12} level level, it was seen that in DN subjects the level was 667.18±229.30 pg/dl. In non DN the level was 335.87±104.8 pg/dl. There was significant difference (<0.001) in Serum B_{12} level between DN and non DN groups. It was seen that vitamin B_{12} status was found to have significant association with Mud Latency (p=0.038), PNCV (p=0.005) and SSNAP (p=0.045) on multiple regression. Logistic regression analysis revealed the DN groups had significant positive association (p<0.001) with serum vitamin B_{12} when the effects of age, BMI and TG were adjusted.

Table-1: Multiple regression analysis with Mud Latency, PNCV and SSNAP as independent variable and age, BMI, Serum B_{12} level as independent variable.

Nerve Conduction parameter	Independent Variables	β (Regression coefficient)	Standard Error	p	Confidence Interval
Mud Latency	Age	0.122	0.080	0.427	-0.224
	BMI	0.028	0.259	0.063	-0.027
	Serum B_{12} level	0.115	0.003	0.408	-0.004
PNCV	Age	-0.026	0.092	0.873	-0.200
	BMI	0.016	0.299	0.919	-0.573
	Serum B_{12} level	-0.431	0.011	0.823	-0.025
SSNAP	Age	0.009	0.123	0.561	-0.176
	BMI	0.067	0.447	0.687	-0.721
	Serum B_{12} level	-0.009	0.018	0.953	-0.037

Discussion:

The major focus of the present study was to explore the association serum B_{12} levels with and peripheral nerve conduction abnormalities in type-2 DM. B_{12} is required to maintain the functional integrity of the cells and is particularly required to optimum metabolic activity of the neuron. The deficiency of B_{12} leads to peripheral neuropathy[6].

A paradoxical situation was revealed in this present study when the B_{12} level was compared between the non DN and DN group. The Dn subjects showed almost doubled values compared the non DN subjects. A careful analysis of data showed that the DN subjects, even before confirmed confirmed by electro diagnosis, presented to the physician with the symptoms and

signs of neuropathy and they had been invariably prescribed with B_{12} in the form of B- complex. This explains the higher value of B_{12} in the DN subjects. In Pearson's correlation test B_{12} showed no significant correlation with any of the NCV parameter either in non DN and DN subjects. However when the subjects were pooled in to a single diabetic group the then B_{12} showed significant association with the Mud Latency, PNCV, PACAMP and SSNAP. An effort was made to explore the association of the association of DN with B_{12} taking into account the major confounders which were found to be significantly different between the non DN and DN groups (Age, BMI abd TG). The analysis was made by logistic regression by taking individual nerve conduction parameters as dependent variables and it was observed MUNCV, Mud Latency, PNCV and SSNAP were found to be associated with B_{12}.

Conclusion:

Specialized center based epidemiological studies on diabetes and peripheral conduction abnormalities in Bangladesh are only few in number. This present study was done explore the association of serum B_{12} levels and peripheral nerve conduction abnormalities in type-2 Diabetes Mellitus (DM) and the possible confounders like age, BMI and glycemic status were carefully handled. Serum vitamin B_{12} levels were significantly higher in the Diabetic with neuropathy as compared to the Diabetic without neuropathy one. On logistic regression analysis the DN showed significant positive association ($p<0.001$) with serum vitamin B_{12} when the effects of age and (BMI) were adjusted. On multiple regression, vitamin B_{12} status was found to have significant association with Mud Latency ($p=0.038$), PNCV ($p=0.005$) and SSNAP ($p=0.045$). It was concluded that serum B_{12} levels had an association with neuropathy type-2 DM subjects and the vitamin seems to affect the Mud Latency, Sud latency, PNCV and SSNAP parameters of the NCVs.

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DIETARY PATTERN AMONG THE TRIBAL PEOPLE OF CHITTAGONG HILL TRACTS, BANGLADESH

Masuma J[1], Baqui[2], Samad[3], Waliur[4], Ashraf[5], Tanvir[6]

Abstract: The proportion of the tribal population in 64 districts varies from less than 1% in majority of the districts to 56% in Rangamati, 48.9% in Kagrachari and 48% in Bandarban in the Chittagong Hill Tracts. In general food poverty is wide spread in CHT with majority of the Tribal/ Ethnic people not secured with respect to food. This descriptive cross sectional study was carried out on 89 subjects during the period of 7th March to 11th March in Rangamati, Kapti and Bandorban of Chitagong Divission with the objective to find out the dietary pattern among tribal people. Among the study people 47% Chakma. Majority90% took three times meal. 94% get breakfast within 8:00 am. Nearly 24% had a gap of (>2 hours) between awake up and breakfast. Majority 82% took their last meal within 10pm.Among them majority 81% measured their food by assumption. Daily food intake majority 79% (>/= 100gm) protein, Fat 94% (>100gm), Carbohydrate 64% (>400gm), Salt 63% (>10gm), Sugar72% (>50gm), Fiber 79%(>50gm), 90% vegetables, 58% fruits, 27% eggs, 19% milk, tea 57%.and 43% (>2 liters) water. 33% of the study people had no cooking and stored facility. Majority 66% had own production of food, of them only 22% had sufficiency. Majority 58% had no food purchasing ability. The study revealed that dietary pattern is very much deficit in balanced diet, Food security is very poor, which should pay special attention. *Prime Medical Journal 2011; 1 (2): 6-9.*

Key words: Purchasing power, Food security,

Introduction:

In Bangladesh there are about 45 different tribal groups spread across the country. The proportion of the tribal population in 64 districts varies from less than 1% in majority of the districts to 56% in Rangamati, 48.9% in Kagrachari and 48% in Bandarban in the Chittagong Hill Tracts. The tribal groups belong to different ethno-lingual communities, profess diverse faith, have unique cultures which is different from mainstream culture and are at varied/ different levels of development (economically and educationally).

Most of them inhabit in hard to reach areas such as hilly terrains or the forest areas where access is generally difficult. Food habit of people in Chittagong Hill Tracts is almost similar to that of the plain land. However they do eat a few items which are not commonly eaten in the plain land such a nappi (fish) bamboo shoots, dried vegetables etc. In general food poverty is wide spread in CHT with majority of the Tribal/ Ethnic people not secured with respect to food. The problem of food security is common in all the ethnic groups. It has also been observed that 62% of all the households irrespective of ethnic backgrounds according to the direct calorie intake are living below the absolute poverty line[1]

Good nutrition means "maintaining a nutritional status that enables us to grow well and enjoy good health". For the promotion, protection and

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maintenance of health in all groups of the population nutritional requirement in terms of Recommended daily intake or Allowance (RDA) is necessary in order to assess the nutritional adequacy of diets. A balanced diet is one which contains all the proximate principles (protein, fat and carbohydrate), minerals and vitamins in due proportions and at the same time meeting the total energy requirements for maintaining health, vitality and well-being of a person. Lack of balanced diet may lead to malnutrition[2]. Bangladesh has made major strides to meet the food needs of its increasing population. An estimate 10% to 15% of the population faces, serious nutritional risk, with nine out of ten children malnourished to some degree. Between 35 & 50 of every 100 newborns suffers from low birth weight. Approximately 70% of mothers are afflicted by nutritional deficiency and anaemia[3].

The study was conducted to see the dietary pattern of Tribal people at Rangamati, Kaptai and Bandorban of Chittagong Division, during the study tour of 3rd year students of Prime Medical College, Rangpur.

Methods & Materials:

This descriptive cross sectional study was carried out on a total number of 89 subjects during the period of 7th March to 11th March in Rangamati, Kapti and Bandorban of Chitagong Divission . Sampling technique was purposive. Key variables were different type of tribe, number of meal, time of meal, staple food, measurement, preparation, stored, production, purchasing power of food. Data were collected by a semi structure questionnaire through face to face interview of the respondent after taken informed consent. This study was carried out after approval of the institution, as a part of course curriculum and at the time of study tour programme of 3rd year students of Prime Medical College, Rangpur. Data were edited, processed and analyzed by simple percentages. All the statistical analysis average, percentages with presentation was performed by the Microsoft Excel data sheet programme.

Results:

The study revealed that the different type of tribal people majority 47% Chakma followed by 25% Marma, 18% Murang, 7% Tripura and 3% others (Table-1). Regarding the number of meal they taken were 90% 3 times, 6% 2 times, 4% 4 times (Table-2).

The study people took their breakfast maximum 49% at (6:00 -7:00 am), 28% at (5:00-6:00 am), 17% at (7:00-8:00 am) and 6% above 8:00 am (Table-3). Gap between awake up and breakfast were majority 39% (½-1) hour followed by 38% (1-2) hours then 12% (2-3) hours and 11% more than 3 hours (Table-4). Time of last meal majority 35% at (8-9pm) followed by 26% at (9-10pm), 18% above 10pm, 16% at (7-8pm) and minimum 5% at (6-7pm) (Table-5).

The Staple food was majority 90% rice. Among them majority 81% measured their food daily by assumption. Among them daily food intake were majority 64% more than 400gms cereals, meat /fish 79% more than 100gms meat /fish, 94% more than 100gm fat, 63% more than 10 gm salt, 72% more than 50gm sugar, 79% more than 50gm fiber, 90% ate vegetable, 65% green leafy vegetable, 58% fruit, 27% egg, 19% milk, 57% tea and 43% more than 2 liters water (Table-6). 33% of the study people had own preparation of food & stored facility of their food. (Table-7) Majority 66 % had own food production, Food purchasing ability majority 42% had capability (Table-7).

Table-1: Different tribe among the study population (n = 89)

Name of Tribe	Frequency	%
Chakma	42	47
Marma	22	25
Murang	16	18
Tripura	06	07
Others	03	03

n =Number of respondent

Table-2: Number of meal taken per day (n = 89).

Number of Meal	Frequency	%
1	-	-
2	5	5.61
3	80	89.89
4	4	4.50

n =Number of respondent

Table-3: Time of Breakfast (n = 89).

Time of Breakfast	Frequency	%
At 5:00-6:00am	25	28.00
At 6:00-7:00am	44	49.40
At 7:00-8:00am	15	17.00
At 8:00 & above	05	5.60

n = Number of respondent

Table:-4: Gap of time between awake up & breakfast (n = 89).

Gap of awake up & breakfast	Frequency	%
½-1 hour	35	39.43
1-2 hours	33	37.32
2-3 hours	10	11.10
More than 3 hours	11	12.14

n = Number of respondent

Table-5: Time of Last meal (n=89)

Time of Last Meal	Frequency	%
At 6:00 -7:00pm	05	05
At 7:00-8:00pm	14	16
At 8:00 -9:00pm	31	35
At 9:00-10pm	23	26
At above10:00pm	16	18

n = Number of respondent

Table-6: Daily Food Consumption by tribal people (n=72)

Food items	Amounts of Food	Frequency	%
Cereal	>400gm	46	64
Meat/fish	>&=100gm	57	79
Oil/Fat	>100gm	68	94
Salt	> 10gm	45	63
Sugar	>50gm	52	72
Fiber	>50gm	57	79
Egg	One	24 (n=89)	27
Milk	One serving	17 (n=89)	19
Vegetable	One serving	80 (n=89)	90
Green Leafy Vegetable	One serving	58 (n=89)	65
Fruit	One serving	52 (n=89)	58
Tea	>200 ml	51 (n=89)	57
Water	>2 litres	38 (n=89)	43

n = Number of respondent
Multiple responses

Table-7: Food security (facilities) (n=89)

Had facilities	Frequency	%
Cooking	29	33
Store	29	33
Production	59	66
Purchasing power	37	42

Discussion:

The tribal groups belong to different ethno-lingual communities, profess diverse faith, have unique cultures which is different to mainstream culture and are at varied/ different levels of development (economically & educationally).The proportion of the tribal population in 64 districts varies from less than 1% in majority of the districts to 56% in Rangamati, 48.9% in Kagrachari and 48% in Bandarban in the Chittagong Hill Tracts[1].The Hill Tracts are untypical of Bangladesh in topography and culture, have steep jungle hills, Buddhist tribal people and relatively low density population. The tracts are about 60 Km (37mi) east of Chittagong. The Hill Tracts is divided into three districts namely, Rangamati, Khagrachari and Bandarban. The indigenous tribal peoples are concentrated in Chittagong Hill Tracts in the southeast, There are 13 tribal groups located in this region, the largest being the Chakma[4].

This present study was conducted in the area (Rangamati, Kapti, and Bandarban) under Chittagong Hill Tracts. Regarding the type of tribe the majority were 47% Chakma followed by 25% Marma, 18% Murang and 7% Tripura, 3% others. This findings represents the existing situation of the study place Regarding the number of meal they taken were 90% 3(three) times, 06% 2(two) times and 4% 4 (four) times. The time of breakfast were maximum 94% within 8:00 am, 24% had a gap between awake up and breakfast. Early breakfast is good for health and the gap must not be more than 2 hours. The Staple food of them majority were 90% rice. This is very much similar with the study conducted by Ahmed F& Aminul Islam Khandaker where it was found that dietary pattern of rickshaw puller in Dhaka city cereals are the major sources of energy, a large proportion of participants do not take eggs (46%), milk77%, meat 46% & fish (32%). Nearly 49% of them had

energy intake below the requirement. Tribe is similar to that of plan land 73% do not take eggs, 82%milk and 36% ate <400gm cereals, 79% above 100gms protein and 94% >100gm fats daily. Both of the study people are hard worker (work against the nature) so that they need more energy and protein. On the other hand, a good percentage of rickshaw pullers take green leafy vegetables (55%) and fruits (85%) at least four times a week whether our study revealed that majority 90% takes vegetables, 65% green leafy vegetable, 58% fruits and 43% (>2L) water daily it must be improved for micronutrients & proper nutrition.

Among them majority 81% measured their food by assumption. For a balance diet measuring food for required amount and a balanced proportionate of all nutrients is essential (RDA). Only 33% of the study people used to prepare food themselves. It could ensure proper hygiene, nutritive value and security of food. Majority 67% had no stored facility. Food accessibility and nutritive value is very much related with the store facility especially with freezing capability of food which is very much poor in our study. Though majority 66% had own production of food of them only 22% had sufficiency. Majority 58% had no food purchasing ability. Food production and income generating activity with nutrition education are the burning issue of tribal people which must be imposed with special attention for them. In general food poverty is wide spread in CHT with majority of the Tribal/ Ethnic people not secured with respect to food. The problem of food security is common in all the ethnic groups. It has also been observed that 62% of all the households irrespective of ethnic backgrounds according to the direct calorie intake are living below the absolute poverty line[1].

Conclusion:

The tribal groups belong to different ethno-lingual communities, profess diverse faith, have unique cultures which is different to mainstream culture and are at varied/different levels of development (economically & educationally).

The Staple food was majority (90%) rice. Among them 81% measure their food by assumption.

Majority (66%) had own production of food and 42% had purchasing ability. Food production and income generating activity with nutrition education are the burning issue of tribal people which must be imposed with special attention.

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Prime Medical Journal 2011; 1 (2): 10-13

OPEN PYELOPLASTY-OUR EXPERIENCE IN A PERIPHERAL TEACHING HOSPITAL

Ashraf Uddin Mallik[1]

Abstract: Hydronephrosis of the renal pelvis, " distension of varying degrees of renal pelvis and calyces, accompanied by progressive atrophy of renal parenchyma due to obstruction in urine flow" is a congenital anomaly pelviureteric junction in children. To save the renal function, surgery such as dismembered pyeloplasty is mandatory. The purpose of this paper is describe our experience on a batch of cases with congenital pelviureteric junction obstruction by identifying the underlying causes of the anomaly. We removed the causes and when no definite cause was found only reduction of the pelvic size was done. *Prime Medical Journal 2011; 1 (2): 10-13.*

Introduction:

Open pyeloplasty has been the "gold standard" for surgical treatment of pelviureteric junction obstruction (PUJO) with a success rate of 90%[1,2]. PUJO is defined as an obstruction of the flow of urine from the renal pelvis to the proximal ureter. The condition is frequently encountered by both adult and paediatric urologists. There are several methods advocated for pyeloplasty Dismembered pyeloplasty has been the criterion standard surgical therapy for UPJO. Retrograde endopyelotomy has developed as an even more minimally invasive approach to treat UPJ obstruction. The most recent advancement in treatment for UPJ obstruction is the development of the laparoscopic dismembered pyeloplasty, they all aim to produce a gradually tapering pelvi-ureteric junction .Still open surgery keeps its important for success. It may be justified to perform an operation simply to lessen the size of the pelvis when no obvious cause is found[3]. Herein, we have shown our experience of successful pyeloplasty for PUJO and reduces the size of the pelvis when no obvious cause was found.

Materials and Methods:

From October 2004 to March 2007, a total of 10 patients with a mean age of 24 yrs, ranged 2.5 to 45 yrs, underwent open pyeloplasty. Among them there was 6 males and 4 females **(Table-1).** Follow-up duration ranged from 1 to 5yrs. PUJO has been diagnosed by clinical symptoms, sonography, IVU or lasic renal scan **(Fig-1 & Fig-2).** Everybody had extrarenal large pelvis, underwent pyeloplasty via flank incision. The underlying causes were tried to find out. Patient's characteristics are shown in table-1. The patients were given general anesthesia, placed in the flank position making sure there were no pressure points on the legs and the elevated arm. A Foley's catheter was inserted The patients were prepared and draped in the usual standard sterile manner. A skin incision was made below 12th rib from the posterior axillary line to the mid-clavicular line anteriorly. The subcutaneous tissues were sequentially divided. All three muscle layers were incised in a similar fashion. The kidney could be palpated without difficulty. Gerota's fascia was identified. Attention was directed to the identification of the ureter inferiorly. The ureter was dissected free and isolated with a baby feeding tube. The ureter was then bluntly dissected superiorly to encounter the renal pelvis. The UPJ was identified.The underlying cause was tried to find out. The cause of obstruction was released. The ureter was transected below the abnormal segment when necessary. The dilated pelvis and remaining proximal ureteral segment were splayed open on the medial border to accept a large spatulated proximal ureter.The dilated pelvis was lessened by resecting the excess portion (Fig-3). A double-J stent was inserted into the ureter in all patients. The lessened pelvis was then anastomosed with the ureter with multiple interrupted/continuous 3-0 vicryl sutures. The area

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was tested with saline instillation and noted to be watertight. A 14F drain tube was placed outside the pelvis and was drained through a separate stab wound incision. It was secured with 2-0 silk sutures to the skin.

The patient was taken out of the flexed position to allow the flank incision to close. The incision was closed in one layer fashion using interrupted 1-0 vicryl sutures. The subcutaneous tissues were approximated and the skin was closed with intradermal sutures. The wound was cleaned, bandaged were secured with tape. Patient was then awaken from anesthesia without complications and transferred to the Recovery Room (RR). The patient arrived to the general ward in stable condition and without any complication. Follow-up included, clinical and USG assessment. No patient was necessary to reoperation except one. The renal stent was removed 4 weeks after operation.

Table 1: Patient characteristics

No. of patient population	10
Male	6
Female	4
Age range (yrs)	2.5 to 45
Mean (yrs)	24
Follow-up duration (yrs)	1 to 5
Duration of study	October 2004 to March 2007

Fig-1: IVU showed accumulation of contrast in left renal pelvis (left PUJO)

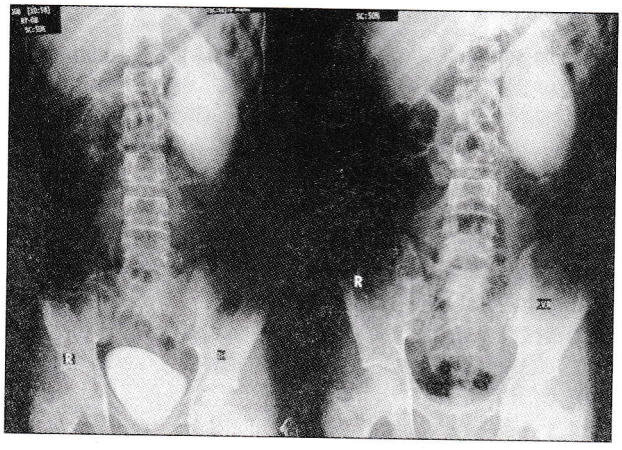


Fig-2: Lasic renogram was performed and showed obstruction in both kidneys.

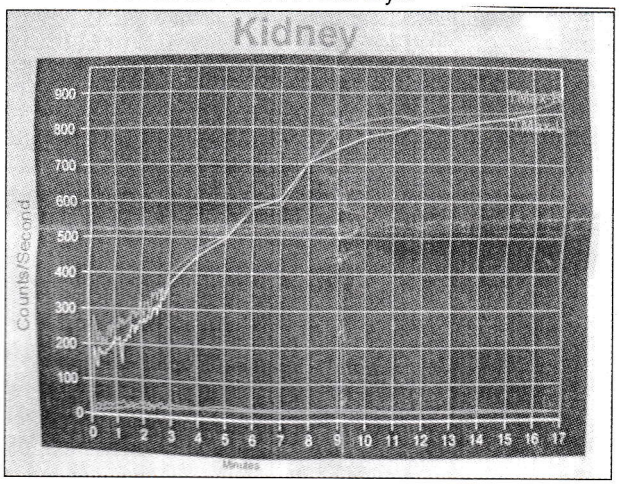
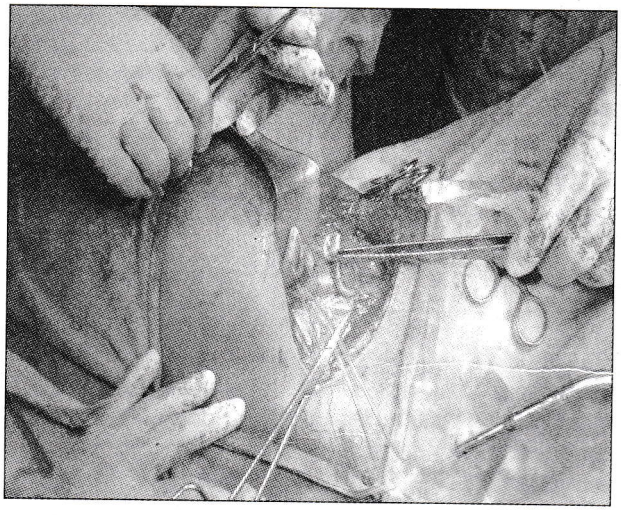


Fig.-3: Dilated renal pelvis was lessened in size



Results:

For underlying causes, an aberrant crossing vessels was found in two patients, upper ureter stricture in 2 patients, high insertion of ureter in one patient and no obvious cause was found in 5 patients (Table-2).

Table-2: Causes of PUJ obstruction found

Aberrant crossing vessels	20%
Upper ureter stricture	20%
High insertion of ureter	10%
No obvious cause found	60%

Few complications encountered postoperatively. Fever in 33% patients, mild hematuria in 56% patients, mild flank pain in 89% patients in our series. NSAID used for fever and flank pain in 89% patients. Over-all success rate in one time operation 90%, operating time was 1.5 to 2.5 hours, mean 2 hrs. Mean hospital stay was 8 days. D-J stent removed at 4th week and Foles Catheter was removed on 3rd postoperative day. One patient required re-open due to blockade of PUJ and was found the cause of obstruction due to urinoma. No other patient complained any sign of pain after removal of D-J stent. There was mild dilatation of the renal pelvis but clinically patients had no complications during follow-up period (Table-3).

Table-3: Overall success rate

Over–all success rate in one time	90%
Operating time mean	1.5 to 2.5 hrs. 2 hrs
Duration of hospital stay mean	7 to 9 days. 8 days.
D-J stent removed	4 weeks after ope.
Foley catheter removed	4th POD
Post opes. fever	33%
Mild hematuria (post. Ope.)	56%
Mild flank pain	89%

Discussion:

Because of the obstruction at the pelviureteric junction the pelvis of the kidney becomes dilated permanently. So correction should be removal of the underlying cause and lessen the pelvic size for easy transport of urine from pelvis to ureter. Studies have indicated that UPJ obstruction is more common on the left side than on the right by a left-to-right ratio of 5:2 and that it has a male-to-female ratio of 5:2[4,5]. Another study found bilateral UPJ obstruction in 32 of 89 cases. The first successful reconstruction of an UPJO was accomplished in 1892[7] Since then open pyeloplasty has been the gold standard for UPJO repair and achieves success rates exceeding 90% in contemporary series.[8,9,10,11] The success rate of minimally invasive options have consistently been less than with open pyeloplasty by 10-30%. [12,13,14] The etiologies of UPJ obstruction are numerous and are classified on an anatomic basis as either extrinsic or intrinsic. Intrinsic causes are inherent to the development and anatomy of the UPJ itself, while extrinsic causes are exterior to the UPJ. Additionally, UPJ obstruction can be classified as primary and secondary. Primary UPJ obstruction is thought to be due to developmental anomalies of the UPJ, while secondary UPJ obstruction is due to other causes, including previous surgery, recurrent stone passage, or infection and vesicoureteral reflux.[15,16]In the embryogenesis, the UPJ is formed during the fifth week. By weeks 10-12 of gestation, the initial tubular lumen of the ureteric bud becomes recanalized, and the UPJ area is the last to recanalize.[17,18] Inadequate canalization of this area is the main embryological explanation of UPJ obstruction. Several growth factors may control embryogenesis of UPJ. Researchers propose that improper innervations with diminished synaptic vesicles may be a factor in the development of UPJ obstruction, and factors involved in neuronal development, such as protein gene product (PGP) 9.5 (a general neuronal marker), S-100 protein (a nerve supporting cell marker), synaptophysin (a synapse vesical marker), and nerve growth factor receptor were all decreased in the resected specimens of UPJ. In one resected specimen of our series, we found more fibrous and collagenous tissue in histopathological study.[19] Another intrinsic etiology that has been described is tissue valves forming mucosal folds and ureteral polyps that may be due to anatomical abnormalities. As first proposed in 1894 by Fenger, these anatomic anomalies may obstruct the ureter at the UPJ in a ball-valve fashion during periods of diuresis.[17] Faulty embryogenesis of the renal unit may be the cause of the anomalous ureteral insertion. Some physicians have classified this cause as extrinsic because the pattern of volume-flow relationships across the UPJ is similar to the pattern of other extrinsic etiologies.[18] Extrinsic etiologies of UPJ obstruction result from lesions that is anatomically exterior to the UPJ itself. These include aberrant or accessory blood vessels, scars from previous surgery, scarring from nephrolithiasis or infection, and other secondary causes such as vesicoureteral reflux.[19] At the time of surgical repair, accessory vessels to the lower pole of the kidney or early

branching of the segmental artery to the lower pole have been found to be associated with cases of UPJ obstruction.[20] Because these vessels pass anterior to the ureter, distension of the pelvis during diuresis has been hypothesized to possibly cause the pelvis to displace anteriorly and hang over these vessels, which produces a kink in the ureter. This kink worsens as the process repeats itself, and the pelvis becomes progressively more hydronephrotic as the result of the developing UPJ obstruction.[20]

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AMYLOIDOSIS OF THE URINARY BLADDER TREATED WITH DIMETHYL SULFOXIDE (DMSO) - A CASE REPORT

Ashraf Uddin Mallik[1]

Abstract: Primary localized amyloidosis of the urinary bladder is a rare clinicopathological entity that may resemble a carcinoma. Herein, we report a case of amyloidosis of the urinary bladder.We treated the case successfully with transurethral resection (TUR) followed by intravesical dimethyl sulfoxide instillation, without any complication. Dimethyl sulfoxide instillation to the bladder is useful for the treatment of localized amyloidosis of the bladder. To make the appropriate diagnosis, transurethral biopsy and histopathological evaluation is important. Neverthless, investigation of systemic amyloidosis is mandatory. *Prime Medical Journal 2011; 1 (2): 14-16.*

Key words: Amyloidosis, bladder neoplasm, dimethyl sulfoxide (DMSO).

Introduction:

Amyloidosis is a disorder characterized by extracellular deposition of eosinophilic fibrillar protein in various tissues and organs. It can be classified as generalized/systemic and localized. Clinically systemic amyloidosis can be subclassified as primary when associated with immunocyte dyscrasia or secondary when it occurs as a complication of chronic inflammation. Localized amyloidosis can be primary or secondary. The organs of the body most commonly involved are urinary bladder, tongue, skin, lung, larynx and eye lids. Amyloid deposition in an organ produces nodular mass and causes pressure atrophy and ultimately impairment of organ function. The deposition of amyloids can occur anywhere in the genitourinary system. The kidney is always involved by secondary amyloidosis, whereas urinary bladder is usually affected by primary localized amyloidosis.[1,2,3]. The primary localized amyloidosis of urinary bladder is very rare 4 when occurs hematuria is the main symptom.[2,5,6]. The etiology of amyloidosis is unknown. Immunomechanism is considered to play a certain role in the production of amyloidosis[4,7,8].

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In the case of bladder amyloidosis a pathogenetic mechanism can be postulated 1,4. Deposition of primary amyloidosis typically involves submucosa and adjacent superficial smooth muscle of the urinary bladder[5]. To our knowledge very few cases have been reported in the world literature. This disease grossly resembles a neoplasm and requires biopsy to make the differential diagnosis[3,6,7]. We want to report a very rare disease like bladder amyloidosis

Case report:

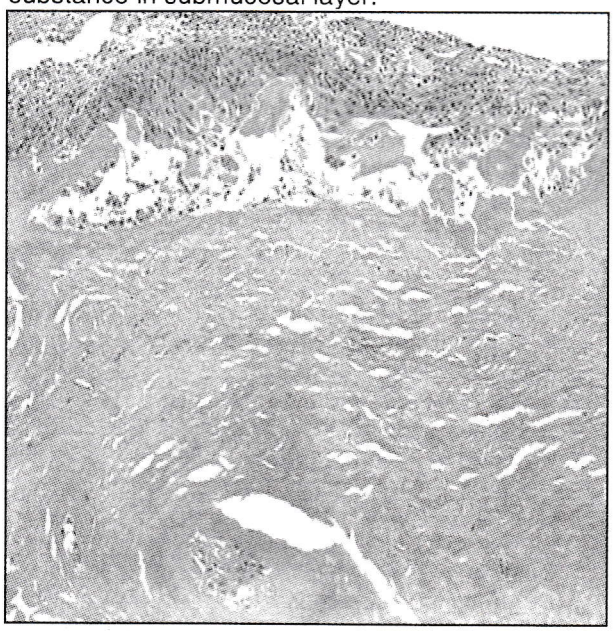
A 65-year-old man was admitted for evaluation of one episode of painless gross hematuria. He had no family history. There was no known past history or other urological history. Physical examination was non-contributory. Laboratory findings were normal except for hematuria. Urinary cytology revealed no malignant cells.

A chest x-ray was normal. Retrograde cystrogram and urethrogram revealed no abnormal filling defect. A drip infusion pyelography showed no abnormality.

At cystourethroscopy, there was a tumor like lesion occupying the trigon of the bladder. The surface of the lesion was yellowish and edematous, irregular, partially reddened for hemorrhage and malignant in appearance . On the other hand USG of both kidneys showed no abnormalities except a cyst in

No abnormalities were found in any of those investigations. For which, we diagnosed the case as primary localized amyloidosis of the bladder. We treated the patient by transurethral resection (TUR) of the tumor. Histopathology examination of the biopsy specimen showed typical abundant amyloid deposits in the submucosal layer which was stained with the congo red dye (Fig-1).

Fig.-1: The microscopic appearance of biopsy specimen from the myloid tumor of the bladder wall shows deposition of eosinophilic omogeneous substance in submucosal layer.



One week after TUR, intravesical instillation of dimethyl sulfoxide (DMSO) was done
once every 2 weeks for 1 year to disintegrate the amyloid deposited in the residual lesion. Fifty ml of 50% DMSO solution were instilled into the bladder and allowed to remain for 30 minutes. The patient received a total of 25 instillations and then has been followed for 2 months. Regular cystoscopy and urinalysis showed no evidence of amyloidosis. He has not had any complication or side effect of DMSO.

Discussion:

Amyloidosis of the urinary bladder is a diagnostic challenge for the urologist, because it closely resembles an infiltrating neoplasm cystoscopically. The
chances are heavily in favour of malignancy especially when lesions are found at the
trigone, as was the case of our patient.[6,9] Primary amyloidosis is more common and has a better prognosis than the secondary disease 4,5,10,11. In the urinary tract, kidney is the more commonly involved organ in systemic or secondary amyloidosis (AA subtype), while urinary bladder is affected by primary localized disease 3. The lesion assumes importance for discussion as it clinically masquerades as a malignancy.Almost all documented cases, along with present cases, of bladder amyloidosis have been known to present with intermittent, gross hematuria, while a few patients presented with irritative bladder symptoms[12, 13.]
On cystoscopy, amyloidosis usually presents as an irregular tumor like mass that bleeds readily and may be ulcerated. Even on radiology, it presents as a mass lesion, sometimes associated with calcification 3, 13. Cystoscopically our case presented as tumor like lesion on the trigone of bladder and suspected as carcinoma bladder. The diagnosis of amyloidosis can only be established on biopsy, supplemented with special stains, as seen in our cases[4,7,10.] The pathogenesis of amyloid deposition in the urinary bladder in unknown to date but it
has been argued that after chronic cystitis, the mucosal and submucosal inflammation causes an influx of plasma cells, subsequently producing immunoglobulin proteins. These may form insoluble fibrils by proteolysis and cause nodular amyloid deposition in the organ. The deposition of amyloids produces increased vascular fragility and hemorrhage, for which there is hematuria 6,11. Once the biopsy confirms amyloidosis a thorough search for possible underlying disease and secondary amyloidosis should be made.Transurethral resection of amyloidosis followed by intravesical instillation of DMSO is the treatment of choice that has been reported as the successful treatment in the literature. DMSO is an industrial solvent, available as a by-product of the paper pulp industry. DMSO is a widely used solvent with pharmacological actions including anti-inflammatory and bacteriostatic activity, analgesia, nerveblocks, diuresis, cholinesterase inhibitor, vasodilatation and muscle relaxation 14,15,16.

the treatment of interstitial cystitis by intravesical instillation. And in primary localized amyloidosis by many authors 15,17. We used DMSO intravesically after transurethral resection of the amyloidosis of urinary bladder. No recurrence even after 1 year follow-up period. We hope intravesical DMSO is very effective for localized amyloidosis.

Conclusion:

Amyloidosis of genitourinary system is rare but primary localized amyloidosis of urinary bladder is more rare mass, which resembles like bladder carcinoma when viewed cystoscopically. Only histopathological finding can give final solution. When bladder amyloidosis is found search for systemic amyloidosis is also mandatory. It has recurrence rate, for which intravesical instillation with DMSO and regular follow-up like bladder carcinoma is necessary.

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College News

List of Topics of Integrated Teaching Presented

Sl.	Name of Topics	Name of Department	Date of Presentation
1	Thyriod function & its disorder	Physiology	28.04.10
2	Postoperative fluid therapy	Surgery	06.10.10
3	Childhood immunization update	Paediatrics	27.10.10
4	Antharx	Community medicine	03.11.10
5	Hypertension	Medicine	10.11.10
6	Rational use of drug	Pharmacology	17.11.10
7	Staphylococcal infection	Microbiology	08.12.10
8	Streptococcal infection	Microbiology	15.12.10
9	Granulomatous inflammation & Granuloma	Pathology	22.10.10
10	TB	Community Medicine	29.12.10
11	Cell Injury	Pathology	05.01.2011
12	Chromosome	Anatomy	09.02.2011
13	Childhood Cancer	Paediatrics	23.02.2011
14	Fate of RBC and Jaundice	Physiology	02.03.2011
15	Lipid Profile	Biochemistry	23.03.2011
16	Wound and Wound Repiar	Physiology	13.04.2011
17	Death due to acute organophosphorus poisoning cases in Rangpur Division	Forensic Medicine	22.06.2011

New Arrival

The Following Personnel have joined in Prime Medical College within the previous six months

1. **Professor Dr. Abul Hossain Khan**, MBBS, M-Phil	Professor of Microbiology
1. **Professor Dr. Col. Md. Mofazzal Hossain**, MBBS, FCPS	Professor of Surgery
9. **Dr. Ali Mahabuba Hasnat**, MBBS, MCPS	Assistant Professor Deptt. of Gynae & Bos.
9. **Dr. Md. Mohiuddin**, MBBS, DA	Assistant Professor Deptt. of Anaesthesiology
9. **Dr. A.S.M Sharif**, MBBS, DA	Assistant Professor Deptt. of Anaesthesiology
9. **Dr. Md. Khairuzzaman**, MBBS, M-Phil	Assistant Professor Deptt. of Microbiology
9. **Dr. Md. Shahdat Hossain**, MBBS, M-Phil	Assistant Professor Deptt. of Pathology
11. **Dr. Md. Ersad Ali**, MBBS	Lecturer, Department of Anatomy
12. **Dr. Farzana Haque Sumi**, MBBS	Lecturer, Department of Anatomy
13. **Dr. Md. Saifur Rahman**, MBBS	Lecturer, Department of Biochemistry
11. **Dr. Md. Atiqur Rahman**, MBBS	Lecturer, Department of Biochemistry
11. **Dr. Zinat Afrin**, MBBS	Lecturer, Department of Biochemistry
11. **Dr. Md. Nader Hossain**, MBBS	Lecturer, Department of Biochemistry
11. **Dr. Md. Ashrafuzzaman Sarker**, MBBS	Lecturer, Department of Community Medicine
11. **Dr. Rozina Afroz**, MBBS	Lecturer, Department of Community Medicine
11. **Dr. Sharmin Sultana**, MBBS	Lecturer, Department of Microbiology
11. **Dr. Shahina Akhter**, MBBS	Lecturer, Department of Forensic Medicine

List of new ntudtnts
3rd batch (Session : 2010-11)

Sl.	Student Name
1.	Md. Alamgir Kabir
2.	Khadiza Farzana
3.	Md. Kamal Hossain
4.	Shrin Marzia
5.	Muhtasim Latiful Islam
6.	Nahida Chowdhury Nipa
7.	Deluar Hossain
8.	Kumar Atanu Das
9.	Zannatul Ferdaus
10.	Anika Bushra
11.	Md. Monowarul Islam
12.	Mezbaul Hoque
13.	Faruka Farhana Shefa
14.	Md. Rasif Hasan
15.	Rumana Alam
16.	M.H. Al- Rafsun Jani
17.	Ananwa Sarker
18.	S.M. Mahedi Hasan
19.	Tahomina Tasnim Bithe
20.	Md. Shameeus Shakeer
21.	Md. Mahmud-ul-Islam
22.	Pollobi Rani Shaha
23.	Tushar Kumar Das
24.	Nilanjona Kundu
25.	Shake Tanjina
26.	Md. Fazla Rabbi Sarker
27.	Md. Habibul Islam
28.	S. M. Mahfujul Islam
29.	Md. Ariful Hassan
30.	Abu Hena Mostafa Kamal Showrav
31.	Umme Fatema
32.	Luna Parvin
33.	Md. Mosharraf Hossain
34.	Shefali Rani Roy
35.	Md. Golam Robbany
36.	Diniat Hussain Dinar
37.	Abu Hena Mostafizur Rahman
38.	Junnatul Fardous Marfi
39.	Most. Nasrin Akter
40.	Taslima Munmun
41.	Arobe Binta
42.	Debashis Kumar Shill
43.	Marufa Zahan
44.	Sharmin Akter Shimu
45.	Md. Nuruzzaman
46.	Noorunnahar Liza
47.	Shabrina Afrin
48.	Fahim Foisal
49.	Khairum Monira
50.	Sara Arabia
51.	Rahnuma Anam
52.	Md. Elias
53.	Sharmin Akter
54.	Sumana Mollik Munni
55.	Tamanna Tasmin
56.	Khandoker Md. Shahidul Islam
57.	Tazkia Kabir
58.	Musharrat Nazneen Mun
59.	Md. Sabirul Islam
60.	Md. Noman Iftikhar
61.	Nipa Roy
62.	Md.Habibur Rahman
63.	Md. Motiur Rahman
64.	Most. Akhi Ara Khatun
65.	Md. Saddam Hossain
66.	Arfina Noor
67.	Md. Mosabber Hossain
68.	M. M. Mahfuzar Rahman
69.	Devid Sarkar
70.	Naima Tanjina
71.	Nusrat Jahan
72.	Nishat Farzana
73.	Most. Sirazum Monira
74.	Shohely Sharmin
75.	Sharmin Shahid
76.	Shahtaz Subrina
77.	Debjit Bokshi
78.	Tislima Islam
79.	Sadia Afrin
80.	Mahamudul Hasan Ebon
81.	Khadamul Islam
82.	Najmul Hassan
83.	Jubayer Akon
84.	Bayazid Hossain
85.	Joynal Abedin
86.	Tomal Bormon Aron
87.	Tamanna Yasmin
88.	Md. Mizanul Islam
89.	Md. Ashiqur Rahman
90.	Jibon Kumar
91.	Fariha Amatul Gaffer

National And International Days Observed

21 February : International Mother Language & Shahid Day
26 March : Independence Day
14 April : Bangla Newyear

External Examiners Comming in 1st Professional Examination

Prof. Dr. Bulbul Afroz - Professor of Anatomy, Rangpur Community Medical College
Prof. Dr. Nazmul Hossain - Professor of Physiology, Shahid Sohwardi Medical College, Dhaka
Prof. Dr. M. A Mojid - Professor of Biochemistry, Rangpur Dental College, Rangpur
Dr. Mohammad Ali - Associate Professor of Biochemistry, Shahid Ziaur Rahman Medical College, Bogra
Dr. Selina Anowar - Associate Professor of Anatomy, Rangpur Medical College, Rangpur
Dr. Chandra Rani Sarker - Associate Professor of Physiology, Rangpur Medical College, Rangpur
Dr. Md. Neaz Ahmed - Assistant Professor of Biochemistry, Rangpur Medical College, Rangpur

Study Tour of First Batch Students

As a part of academic activities of Community Medicine the students of 1st batch of the college visited the chittagong hilltracks and conducted a survy which is published in this Jurnal.

Positions available

The Following positions are available for the competent doctors for the following Department:

1. Professor of Pathology
2. Professor of Skin & VD
3. Professor of Psychiatry
4. Professor of Orthopaedics
5. Associate Professor of Cardiology
6. Assistant Professor of Cardiology
7. Assistant Professor of Paediatrics
8. Associate Professor of Surgery
9. Assistant Professor of Surgery
10. Assistant Professor of Anatomy
11. Assistant Professor of Microbiology
12. Assistant Professor of Pharmacology
13. Assistant Professor of ENT
14. Assistant Professor of Gynae & Obs

Information for the Contributors

Manuscripts prepared following the "Uniform Requirements for Manuscripts to Biomedical Journals" is acceptable to this journal for publication.

Editorial scope:

- The Prime Medical Journal (PMJ) is intended to promote prompt publication of concise scientific article based on the study in all fields of medical and health sciences.
- Submitted manuscripts should not be previously published or being considered for publication elsewhere.
- All submitted articles will undergo double blind peer review as per recommendations by subject specific experts selected by editors.
- Reviewed manuscripts will be sent to the corresponding author for appropriate response if it is indicated.
- Acceptance is based on significance, originality clarity and fulfillment of the criteria of the publication policy of this journal.
- The Editor- in- Chief will make all final decisions regarding acceptance.
- Selection of the reviewed and accepted manuscripts intended for publication in a particular issue will be decided by Editorial Board.
- Rejected manuscript will be returned if accompanied by stamped or self- addressed envelop.
- Upon acceptance for publication the copy right of the paper automatically transfers to the PMJ and will not be published elsewhere either in part or whole without written permission of the copyright holder.
- Review article should be written by a subject expert.

Ethical aspects:

- Manuscripts based on the study should have been conducted according to the ethical standards laid down in the 1994 Declaration of Helsinki revised 2000.
- Manuscript must contain a statement in the method section that all human subjects involved in studies have been approved by appropriate ethical committee after careful examination of the ethical aspects.
- Permission of the patients or their families to reproduce photographs of the patients where identity is not disguised.
- Author should obtain written permission to reproduce any table, illustration from any other source.

Manuscript submission:

The authors are requested to strictly follow the guide lines below for submission of manuscript to PMJ for publication. The following documents with manuscripts are to be submitted for publication.

- A covering letter addressed to the Editor-in-Chief of the journal (Sample given at the end).
- Abstract and key words in the first page followed by the text
- Authors must submit 2 hard copies of all documents and one copy in electronic form preferably written in a CD with adequate labeling.
- In special case, submission through E-mail with file attachment of all documents is acceptable.

Covering letter:

- All authors must sign after seeing the manuscript with the Statement that they only
- authors they are the only authors.
- The corresponding author should mention the contribution of each author to the work.
- It should contain a declaration that this manuscript has not been submitted else where or not under consideration in any journal.
- It should clearly indicate the publication type (Original/Review/Case report/Letter etc).
- It should be also mention the expected benefit of the medical science from publishing of this article.

Authors are requested to submit new and revised manuscript to:

Editor-in Chief
Prime Medical Journal
Prime Medical College
Pirjabad, Badargonj Road, Rangpur.
Tele:+0521-53902
E-mail: pmcrang@gmail.com

Manuscript Organization:

Typing

- Double spaced throughout with Justified and 2.5 cm margins in the left and top.
- Font type is Times New Roman with size 12.
- Printed on a good quality A4 80 gm on one side of paper.
- Manuscript should have uniform style, correct journal format, carefully proofread for grammar, spelling and punctuation.

Manuscript format

In general, original article should be divided into following sections: Title page, Abstract Text, Tables with titles and foot notes, alternatively Graph with title and Illustrations with legends. Each of the sections is to start on a separate page. Pages should be numbered consecutively beginning from the abstract.

Title page:

- Title of the article (Not exceeding 60 characters).
- Names of all authors with their designation and institutional affiliations Name of the department and institute where the study was undertaken
- Name of the corresponding author with contact address, telephone number, Email address.
- Disclosure of conflict of interest (if any).
- Disclosure of sources of funding or sponsor

Abstract:

- Structured with headings (Background, Objectives, Methods with statistical analysis, Result & Conclusion).
- Authors name should not be given.
- Preferably within 250 words.
- Avoid abbreviations in the title and abstract except standard abbreviation.
- A non structured abstract is suggested for review article and case report.

Text:

- Text should be arranged into Introduction, Materials & Methods, Results, Discussions, Acknowledgement & References (IMRDAR).

Introduction:

- Statement of the problem with a short discussion of its importance and significance.
- Review of the literature related to the problem with pertinent reference.
- Objectives/ hypothesis/ benefits expected stated in 1-2 paragraph.

Materials & Methods:

- Study type, place and time.
- Description of study variables.
- Description of study subjects and grouping.
- Selection criteria
- Approval of the study involving human subjects by ethical review committee and description of the ethical aspects in such study
- Description of procedure, methods, apparatus, drugs or chemicals as applicable.
- Description of statistical procedure with enough detail to enable a knowledge able reader with access to the original data to verify the reported results

Results:

- Present result in logical sequence in text, table and illustration with most important finding first.
- Describe without comment.
- Restrict number of table and figure needed to support assessment of paper.
- Do not duplicate data in table and figure.

Table:

- Simple self explanatory with brief title, not duplicate in text.
- Each table should be numbered in Romans and printed in separate page.
- Do not use internal horizontal and vertical rules.
- Uses o9f many tables are not encouraged.

Illustration:

- All illustrations must be numbered consecutively in English numerals as they appear in the text.
- Submit print photograph of each Illustration along with its electronic file.
- Figure number, title of manuscript, name of the corresponding author and arrow indicating top should be written on a sticky label affixed on the back of each photograph.
- Scanned picture, graph, chart with title and figure number should be printed on separate page and its original data presentation file should be inserted in the CD along with text.

Legend:

- Must be typed in a separate sheet of paper.
- Photomicrograph should indicate the magnification, internal scale and the method of staining.
- All drugs should be mentioned in their generic form. The commercial name may be used in parenthesis

Acknowledgement:

- Individuals, Institutions, Sponsors, Organizations of bodies can be acknowledged in the article for their contribution or financial or any form of assistance to the work.

References:

- For reference, use author number style (Vancouver) which is based on an ANSI standard adapted by the National Library of medicine (NLM).
- References should be numbered consecutively in the order on which they are first mentioned in the text.
- Identify references in the text, tables and legends by English numerals in superscript.
- All citations to electronic references should be presented in numbered references following the text.

The titles of the journals should be abbreviated as

- Coding to the style used in Index Medicus.
- Write names of 6 authors followed by et al, if authors number is more than six.
- The reference list is also checked by the editorial staff or reviewer. So, it is the responsibility of author to provide accurate information.

Standard journal article:
Example:
Khalil M, Chowdhury MAI, Rahman H, Mannan S, Sultana SZ, Rahman MM, etal Splenic Mass and its relation to age, sex and height of the individual in Bangladeshi People. J Bangladesh Soc Physiol 2008;3(1):71-78.

Journal article with organization as author:
American diabetes Association. Diabetes Update. Nursing, 2003 Nov; Suppl: 19-20.

Journal article with multiple organization as author:
American Dietetic association; Dietitians of Canada; Position of Dietetic association and Dietitians of Canada Nutrition and Women's health. J Am Deet Assoc 2004 Jun; 104(6): 948-1001.

Journal article with Governmental body as author:
National Institute on Drug Abuse (US); Caribbean Epidemiology Centre; Pan American Health Organization; World Health Organization. Building a collaborative research agenda: drug abuse and HIV/AIDS in the Caribbean 2002-2004. West Indian Med J. 2004 Nov; 53 suppl 4: 1-78.

Standard book with initials for authors:
Eyre HJ, Lange DP, Morris LB. Informed decisions: the complete book of cancer diagnosis, treatment and recovery 2nd ed. Atlanta: American Cancer Society; 2002.768p.

Contributed chapter of a book:
Rojko JL, Hardy WD. Feline lukemia virus and other retroviruses. In: Sherding RG, editor. The cat: diseases and clinical management. New York: Churchill Livingstone; 1989. p 229-332

Conference Proceedings:
Pacak K, Aguilera G, Sabban, E, Kvetnansky R, editors. Stress: current neuroendocrine and genetic approaches. 8th symposium on Catecholamines and Other Neurotransmitters in stress: 2003 Jun 28-July 3; Smolenice Castle (place of conference), Slovakia. New york (place of publication): new York Academy of Sciences (publisher); 2004 Jun. 590 p.

Scientific and Technical Reports:
Page E, Harney JM. Health hazard evaluation report. Cincinnati (OH) (Place of publication: National Institute for Occupational Satety and Health)(US)(Publisher); 2001 Feb.24p (Total number of pages). Report No: HETA2000-0139-2824.

Dissertation & Thesis:
Entire Reference
Kempner JL. Aching heads. making medicine gender and legitimacyin headache (title) [dissertation] [Philadelphia] University of Pennsy lvania;2004.271p.

Alam M. Study of Heart Rate Variability in Adolescent Athletes [m Phil thesis]. [Dhaka]: Bangabandhu Sheikh Mujib Medical University; 2008. 178p.

Part of Dissertation & Thesis:

Mackowski MP. Human factors: aerospace medicine and the origins of manned space flight in the United States [dissertation]. [Tempe (AZ)]:Arizona State University;2002 May. Part 2, Space medicine;p. 188-377.

Alam M. heart Tate Variability in Adolescent Athletes[M Phil thesis].[Dhaka(Bangladesh)]: Bangabandhu Mddical University;2008 July. Appendix (Name of the part 4(Number of the part),Classification of Physical Activity Intensity (Title of the part).p.7 (Location of the part).

Standard journal article on the Internet:

Kaul S, Diamond GA. Good enough: a primer on the analysis and interpretation of noninferiority trials. Ann Intern Med [Internet]. 2006 July 4 [cited 2007 Jan 4];145(1):662-9. Available from:http://www.annals.org/cgi/reprint/145/1/62.pdf

Journal article on the Internet with organization (s) as author:

National Osteoporosis Foundation of South Africa. Use of generic alendronate in treatment of osteroporosis. S Afr MedJ[Internet].2006Aug[cited 2007 Jan 9];9(8):696-7.Available from:http:/blues.sabinet.co.za/WebZ/Authorize?

Journal article on the Internet with governmental body as author

Centers for Disease Control and Prevention (US), National center for HIV/AIDS, Hepatitis, STD, and detention and control of tuberculosis in correctional and detention facilities: recommendations from CDC. Endorsed by the Advisory Council for the elimination of tuberculosis, the national Commission of Correctional Health Care and the American correctional Association. MMWR R Rep[Internet].2006 July 7[cited2007Jan9];55(RR-9):1-44. Available from:http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5509al.htm

Journal article on the Internet with no author:

Prevention strategies for asthma-secondary prevention.CMAJ [Internet]2005 Sept[cited2007Jan5];173(6Suppl):S25-7.Available from:http//www.cmaj.ca/cgi/content/full/173'6_suppl/S25

Journal article on the Internet without standard volume, issue or article number:

Jacobs JL, Lee MT, Lindberg M, Kamin C. Problem based learning, multimedia paucity of behavioral issue learning Med Educ. Online [Interner].2005[cited2005]: [5p]. Available from:http:www.med-ed-online.org/pdf/10000006.pdf

FOR WARDING LETTER FOR SUBMISSION TO PMJ

Date .

To
The Editor-In-Chief
Prime Medical Journal
Prime Medical College, Rangpur

Sub: Submission of manuscript

Dear Sir,
We are submitting our manuscript entitled, ...by
1).....
2).....
3).....
4).....
5).....
for publication in your journal. This article has not been published or submitted for publication elsewhere.

We believe that this article may be of value to medical professionals engaged in Biochemistry/Internal medicine/ Surgery/Gynae/ . We are submitting 2 copies of manuscript along with an electronic version (CD).

We, therefore, hope that you would be kind enough to consider our manuscript for publication in your journal as Original/Review article/Case Report.

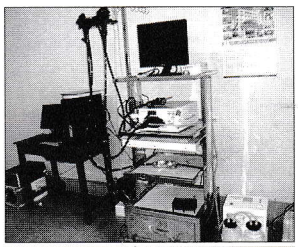
Thanks and best regards

1).....
2).....
3).....
4).....
5).....

*Corresponding author

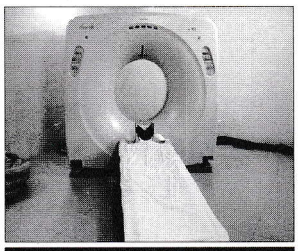
হাসপাতাল ভবনের একাংশ

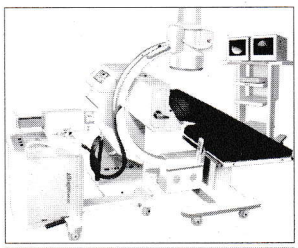
প্রাইম মেডিকেল কলেজ হাসপাতাল, রংপুর
(৫০০ শয্যা বিশিষ্ট পূর্ণাঙ্গ
বেসরকারী মেডিকেল কলেজ হাসপাতাল)


ভিডিও এন্ডোস্কপি

হাসপাতালের বিভাগ সমূহ

- ❖ মেডিসিন বিভাগ
- ❖ সার্জারী বিভাগ
- ❖ স্ত্রীরোগ ও প্রসূতি বিভাগ
- ❖ শিশু ও নবজাতক বিভাগ
- ❖ অর্থোপেডিক্স বিভাগ
- ❖ চক্ষু বিভাগ
- ❖ নাক,কান ও গলা বিভাগ
- ❖ ইউরোলজি বিভাগ
- ❖ হৃদরোগ বিভাগ
- ❖ নিউরোলজি বিভাগ
- ❖ ক্যান্সার বিভাগ
- ❖ ডায়াবেটিক সেন্টার
- ❖ শিশুসার্জারী বিভাগ
- ❖ রিহ্যাবিলিটেশন সেন্টার
- ❖ ফিজিওথেরাপী সেন্টার
- ❖ দন্ত বিভাগ

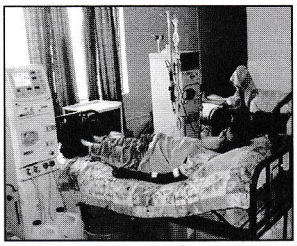

স্পাইরাল সিটি স্ক্যান


স্টোনক্রাশ

প্রাইম ডায়ালাইসিস সেন্টার

সম্পূর্ণ নতুন ৬ টি জাপানী টরে মেশিনের সমন্বয়ে **ডায়ালাইসিস সেন্টারে** ২৪ ঘন্টা ডায়ালাইসিস করার সু-ব্যবস্থা


ডিজিটাল 4-D কালার ডপলার


ডায়ালাইসিস সেন্টার

প্রাইম সিসিইউ

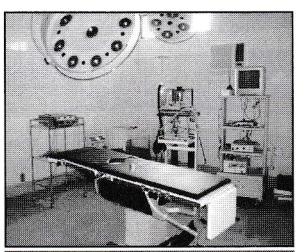
হৃদরোগীদের সু-চিকিৎসার জন্য অত্যাধুনিক যন্ত্রপাতি ও বিশেষজ্ঞ চিকিৎসকবৃন্দের সমন্বয়ে "প্রাইম সিসিইউ" **সিসিইউ এর সার্বিক তত্ত্বাবধানে রয়েছেন অধ্যাপক ডাঃ নওয়াজেস ফরিদ, বিভাগীয় প্রধান, হৃদরোগ বিভাগ, প্রাইম মেডিকেল কলেজ ও হাসপাতাল, রংপুর।**

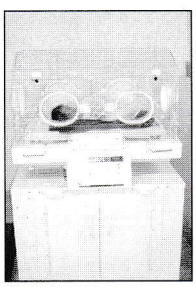
প্রাইম আইসিইউ

উত্তরবঙ্গে এই প্রথম আইসিইউ। মুমূর্ষ রোগী, জটিল অপারেশন পরবর্তী নিবিড় পরিচর্যা ও সু-চিকিৎসার জন্য অত্যাধুনিক যন্ত্রপাতি ও বিশেষজ্ঞ চিকিৎসকবৃন্দের সমন্বয়ে "প্রাইম আইসিইউ"

প্রাইম স্টোনক্রাশ সেন্টার

উত্তরবঙ্গে এই প্রথম কোনপ্রকার অপারেশন ও কাটা-ছেঁড়া ছাড়া ব্যথামুক্তভাবে কিডনীর পাথর অপসারনের সু-ব্যবস্থা।


অপারেশন থিয়েটার - ৭


নিওনেটাল ভেন্টিলেটর

নবজাতক নিবিড় পরিচর্যা কেন্দ্র

নবজাতক শিশুদের নিবিড় পরিচর্যা ও জন্ম পরবর্তী জটিলতার চিকিৎসার জন্য সার্বক্ষণিক নিওনেটাল আইসিইউ।

২৪ ঘন্টা সকল এ্যম্বুলেন্স ও প্রকার পরীক্ষা-নিরীক্ষার সু-ব্যবস্থা

সর্বাধুনিক প্রযুক্তির সেবাসমূহ

- ❖ সিটি স্ক্যান
- ❖ ভিডিও এন্ডোস্কোপ
- ❖ ডিজিটাল 4-D কালার ডপ্লার
- ❖ ডিজিটাল ইকোকার্ডিওগ্রাম
- ❖ ডিজিটাল আল্ট্রাসনোগ্রাম
- ❖ ডিজিটাল এক্স-রে
- ❖ স্পেশালাইজড প্যাথলজি
- ❖ সাইটোলজি ও বায়োপসি

প্রাইম মেডিকেল কলেজ হাসপাতাল, রংপুর

পীরজাবাদ, বদরগঞ্জ রোড, রংপুর (কেন্দ্রীয় বাস টার্মিনালের অর্ধ কিলোমিটার পশ্চিমে)

ফোন ঃ ০৫২১-৬১২৯০, ৬১২৯১, মোবাইল ঃ ০১৭৩০০৩৩১১০, ০১৭১৮৫৩২৪৩৮, ০১৭১৯২০৮৭৪৭