Abstracts of Papers Presented at The 183rd Research Meeting of The Medical Research Centre of Bombay Hospital Trust on Monday 9th August 2010 (Convener : Dr. Rajkumar Choudhary)

1. Ambulatory blood pressure measurement in patients with chronic kidney disease : outcomes and correlation with clinic BP and BPTRU.

Aditya Bhabhe, Kirpalani D, Shankar P, Shah H, Kirpalani AL

Objective : This is a pilot study is to determine the pattern of hypertension, and the overall 24 hour blood pressure control in patients of chronic kidney disease (CKD) using 24 hour ambulatory BP monitoring (ABPM) and correlate the findings with clinic BP measurements(CLBP) and BPTRU.

Methods : 20 consecutive hypertensive CKD (stage II-V) underwent routine CLBP measurement by Sphygmomanometer followed by Oscillometric method using the automated device called BPTRU. Thereafter 24 hour ABPM was done.

Results :

	Clinic BP		**ABPM**		**BPTRU**	
	SBP	DBP	SBP	DBP	SBP	DBP
WCH (n=7) 35%	153±16[a]	90 ± 8	129±12[b]	80 ± 13	129 ± 7[c]	82 ± 9
	a v/s b : *p<0.05*			b v/s c : *p>0.05*		
MH (n=6) 30%	136 ± 5[d]	83 ± 5	140 ± 6[e]	88 ± 12	132 ± 5[f]	85 ± 9
	d v/s e : *p<0.05*			e v/s f : *p<0.05*		
Others (n=7) 35%	146 ± 29	88 ± 20	158 ± 21	88 ± 10	144 ± 25	87 ± 18

- 60% (n=12) of the study population had blood pressure overload. Of these 11 had systolic overload; 9 had both systolic and diastolic overload and only 1 had isolated diastolic BP overload.
- The average pulse pressure was high (48 mm Hg).
- The prevalence of WCH was 35%. In these patients BPTRU correlated better with ABPM readings than CLBP.
- 30% patients had masked hypertension (normal CLBP but > 50% readings above normal in 24 hr ABPM).
- The normal nocturnal dip was absent in 45% patients.

Conclusion : Single time CLBP fails to detect WCH and MH, and is a poor indicator of overall blood pressure control. Since these parameters have important therapeutic and prognostic implications in CKD, we recommend periodic 24 hr ABPM as a clinical guide for adjustment of anti-hypertensive therapy to achieve BP targets in CKD. BPTRU can be a very useful and cost effective alternative in assessment of WCH.

2. A video demonstration and significance of filarial dance sign

Rohan Valsangkar, R. K. Garg, Umesh Oza, Dayal Partap, Puskar S. Choudhary, Prashant Gupta

A case of 37 yr male, resident of filarial nonendemic area with left scrotal mass is reported. On ultrasound typical filarial dance sign was seen. On few days after initiation of diethylcarbamazine treatment, he reported symptomatic increase in pain and swelling. Due to the severity of symptoms, cyst excision was done.

Filarial dance sign is a very specific and peculiar sign, frequently reported from filarial endemic areas but not so commonly from non-endemic areas. A video demonstration is presented. Also its importance in indicating the activity and chronicity of the disease, assessing the response to treatment are discussed.

3. Open Radical Prostatectomy : Our 12 years Experience

Dayal Partap, J.N.Kulkarni, Umesh Oza, Rohan Valshankar, Puskar S. Choudhary, Prashant Gupta

Aim : We herein report the outcome analysis of retropubic radical prostatectomy (RRP) performed in 428 patients in terms of pathological findings, complications and survival.

Material and Methods : Hospital records of 428 RRPs done in 12 year period were analysed using SPSS 12 software.

Results : Demographic data showed age range 42.4-82.6 years (mean 63.3 years). Pre operative PSA was <10 ng/litre in 177(41.4%) and >10 ng/litre in 251(58.6%) patients, biopsy gleason score was 2-4, 5-6, 7, and 8-10 in 30(7%), 231(53.9%), 107(25%) and 60(14.1%) patients respectively and clinical staging was T1, T2a+T2b, T2c and T3 in 177 (41.4%), 136(31.7%), 105(24.6) and10(2.3%) patients. Standard RRP was done in majority 383 while 45 had nerve sparing surgeries. Early and late complications occurred in 45 and 28 patients with urine leak in 1.9% and bladder neck contracture (2.5%). Pathologically the specimen showed pT0, pT2a, pT2b, pT2c, pT3a and pT3b disease in 8(1.86%), 20(4.69%), 36(8.43%), 110(25.8%), 87(20.4%) and167(39%) patients respectively while positive Surgical Margins (PSM) and positive nodes seen in 91 (21.3%) and 78 (18.2%). Further 98% patients were continent at 24 weeks and 59% were potent at 12 months. Five year and ten year survival was 86.2%(65.3%), 82.9%(40.5%), 81.5%(51%) and 57%(19%) respectively in clinical stage T1, T2a+T2b, T2c and T3 whereas in pathological stage PT0, PT2a, PT2b, PT2c, PT3a and PT3b was 100%(100%),92.3%(92.3%), 96.9%(66%), 91.6% (56.7%), 86%(73.6%) and 85.7%(58.2%) respectively.

Conclusion : Our series spanning over decade demonstrates that RRP is viable option to offer cure Organ Confined Carcinoma Prostate. Although our series is modest in number the success rates and out come data matches the literature.

4. Xanthogranulomatous prostatitis Rare presentation of rare disease

Rohan Valsangkar, D.D.Gaur, Umesh Oza, Dayal Partap, Puskar S. Choudhary, Prashant Gupta

Granulomatous inflammation of prostate is a rare type of inflammation of prostate. It is divided into multiple types with nonspecific type of granulomatous inflammation being most common. Xanthogranulomatous prostatitis is a rare type of granulomatous prostatitis of which very few cases have been reported. Histologically it is charactarised by presence of pale looking foamy marcophages in the prostate. It is typically an incidental finding post TURP, although it may mimic prostatic malignancy clinically, biochemically and rarely histologically. Our case is rare due to the clinical presentation being very similar to prostatic abscess. Our case had unevenful recovery after transurethral resection of prostate.

5. Supine Percutaneous Nephrolithotomy (PCNL) Our experience : making the patients stone

Prashant Gupta, P Pattnaik, U Oza, Rohan V, Dayal Partap, Puskar S. Choudhary

Objective : To report our experience of supine PCNL for treatment of upper tract pelvic calaceal stone in obese and high cardiopulmonary risk patients.

Patients and Methods : We have done supine PCNL in 19 renal units in 18 patients between Jan 2007 and Dec. 2009 in our Dept.

Results : Regardless of position pcs puncture achieved in all patients 100% stone clearance in all 19 renal units, significant bleeding in 1 patient, persistent haematuria in 1 patient, urine leak in 1 patient managed conservatively stopped after 3 days, BT in 2 patients.

Conclusions : Supine PCNL is equally good and safe technique, highly effective and valuable for obese and high risk cardiopulmonary compromised patients. With good stone clearance rate and less post-operative complications and overall reduced operation time.

6. Can Total retroperitoneal approach alter morbidity in radical cystectomy

Puskar Shyam Chowdhury, JN Kulkarni, U Oza, Dayal pratap, Prashant, Rohan

Purpose : We evaluated and compared early postoperative complications and 3-month mortality after radical cystectomy by total retroperitoneal and transperitoneal approach using a standardised method to report complications.

Material and Methods : We retrospectively collected data on all 238 consecutive patients who underwent radical cystectomy for nonmetastatic bladder transitional cell carcinoma at a tertiary academic referral centre from January 1990 to December 2002. The Martin criteria were used to report complications, which were graded according to a 5-grade modification of the Clavien system.

Results : A total of 231 complications occurred in 174 patients (49%), of which 13% were grades 3 to 5. The 3-month mortality rate was <1%. After evaluating the whole patient cohort American Society of Anaesthesiologists score was the covariate significantly associated with grade 3 to 5 complications on univariate analysis. Subgroup analysis limited to patients of Radical Cystectomy by total retroperitoneal approach shows decreased complication rate in comparison with transperitoneal approach. Female gender and American Society of Anaesthesiologists score were independent predictors of grade 3 to 5 complications on multivariate analysis.

Conclusions : When applying a standardised methodology to report early morbidity, about 50% of patients undergoing radical cystectomy had complications within 3 months of surgery. Although most complications were minor, about 13% of patients experienced grade 3 to 5 events, resulting in a 3-month mortality rate of <1%. American Society of Anaesthesiologists score was significantly associated with major complications, while on subgroup analysis in patients who underwent total retroperitoneal approach showed decrease morbidity and overall complication rate. Female gender was also an independent predictor of major complications.

Abstracts of Papers Presented at The 184th Research Meeting of The Medical Research Centre of Bombay Hospital Trust on Monday 13th September 2010 (Convener : Dr. Rajkumar Choudhary)

1. Immune Thrombocytopenic Purpura in Pregnancy

Shikha Chandrawat, Rumi Bhattacharjee, Parul Sharma, Nitin PaiDhunghat

Background : Idiopathic thrombocytopenic purpura (ITP) is a common haematologic disorder caused by immune-mediated thrombocytopenia. The magnitude of the maternal-foetal risk of ITP during pregnancy is controversial. Labour management of pregnant women with ITP remains controversial. Management of ITP during pregnancy is complex because of the disparity between maternal and foetal platelet counts.

Objective : To investigate pregnancy and perinatal outcomes in women with immune thrombocytopenic purpura (ITP). To assess the effectiveness of multimodality approach including corticosteroids, intravenous immunoglobulin, timely use of blood products and decision regarding mode of delivery of idiopathic thrombocytopenic purpura during pregnancy.

Methods : A case report of two pregnant women with ITP was conducted in the month of august. Detailed clinical history, clinical examination and investigation findings were studied.

Conclusion : ITP is significantly and independently associated with maternal and perinatal mortality and morbidity.

There were no maternal death, perinatal mortality, postpartum haemorrhage and neonatal intracranial haemorrhage in our study.

2. Maternal and Foetal Outcome in Pregnancy with Pyrexia

Rumi Bhattacharjee, Parul Sharma, Nitin Pai Dunghat

Introduction : Fever is body's normal and healthy reaction to infection and other illness, both minor and serious. A body temperature higher than 98.6 degrees F (37.5 degree C) is known as pyrexia. Fever in pregnancy is a major public health problem in tropical and subtropical regions through the world, the causes being mainly viral, bacterial and endemic diseases.

Aim : Fever in pregnancy is an inadequately researched subject and the burden is probably higher than current estimate suggests. This paper models the burden of pyrexia in pregnancy, the main causes and associated foetal and maternal outcome in terms of morbidity, mortality and pregnancy outcome.

Method : In this study, eight antenatal cases were taken who presented with fever at various gestational periods. All these cases were studied in details with regards to history, clinical examination, investigation and management.

Results : In this study, 5 cases presented with malaria, out of which, 1 patient underwent emergency LSCS for foetal distress and the rest were discharged with continuing pregnancy. One patient with Hepatitis E went into preterm labour and the baby is in NICU. One patient presented with dengue. She went home with continuing pregnancy. One patient presented with both malaria and dengue. She was also discharged with ongoing pregnancy.

Conclusion : Fever in pregnancy especially due to endemic diseases is a obstetric and medical problem requiring multi disciplinary and multidimensional solution. However, timely intervention and appropriate management can save many a life and alter maternal and foetal prognosis favourably.

3. Takayasu's arteritis and pregnancy : A case of deleterious association

Jay Sheth, C M Nariani, S K Desai, Prema Kania, Juhi, Sonali, Vaishali.

Introduction : Takayasu's arteritis is a rare clinical entity characterised inflammatory involvement of large arteries in the form of progressive obliteration of the aortic arch and the main vessels arising from it and, in some cases, of the thoracic and abdominal aorta and its branches and pulmonary vessels. It is predominantly found in young Oriental women. The evolution of the disease is chronic and may be fatal in 1 to 16 years after the diagnosis has been made. Only in a few instances

has Takayasu's disease been reported in association with pregnancy and in the majority of the reported cases it was not associated with obstetric problems, however may not be always so.

Case report : O.M.B.B., a 27-yr-old G2P0A1, referred to our institute at 17 weeks of gestation. The diagnosis of Takayasu's arteritis was established 9 years ago, and patient was on regular treatment. Past history revealed progression of disease and she had an episode of left sided heart failure. Obstetric history revealed a spontaneous abortion one year back. Inspite of treatment, she experienced symptoms more frequently, finally was referred by treating cardiologist for termination. In maternal interest pregnancy was terminated with prostaglandins, followed by Oxytocin, uneventfully.

Conclusion : Takayasu's arteritis may not always have an uneventful or favourable course in pregnancy. It may worsen during pregnancy so much so that pregnancy might have to be terminated.

4. Infantile onset Pompe's Disease - Case report :

Heena B, Swati M, Aashish Mahuvakar, P. N. Sheth

Pompe's disease is a rare inherited metabolic disorder, in the family of lysosomal storage disease caused by deficiency of acid maltase, an enzyme involved in glycogen metabolism. Infantile onset Pompe's disease is uniformly lethal. Death is from severe cardiomyopathy.

This report describes a 7 months old female child, who was diagnosed outside as a suspected case of idiopathic hypertrophic cardiomyopathy and was on treatment with propranolol. Child presented to us with cardiopulmonary symptoms. Detailed examination revealed hypotonia, macroglossia, hepatomegaly, cardiomegaly with systolic murmur. ECG, Echocardiographic and radiological evidence supported the clinical suspicion of Pompe's disease. It was later confirmed with absent maltase activity on specific investigation.

The child has since then been put on replacement therapy with the specific enzyme and has started showing signs of improvement.

5. Approach to A Case of Short Bowel Syndrome

Manoj Rathod, Swati Madake, P N sheth, Ramadwar

A full term small for gestation (SGA) male baby was born to a 3rd Gravida by LSCS i/v/o unexplained persistent foetal tachycardia. Baby required resuscitation at birth and on examination was found to have tense abdomen with absent bowel sounds, hence baby was admitted in NICU and investigated .

In view of progressive symptoms, baby underwent exploratory laparotomy on day 2nd of life and found to have infarction of small bowel in territory of superior mesenteric artery (SMA). Extensive resection of small bowel was done (jejunum 5 cm from DJ flexures and terminal ileum 9 cm up to ileo colic junction was retained) with ileostomy and jejunostomy was done.

Post operatively baby was on ventilators support and had started getting frequent loose stool suggestive of short bowel syndrome. Total parental nutrition(TPN) was started. Reanastomosis was done on day 13 postoperatively. As babies condition was stabilised and he started gaining weight he was discharged on day 44 of life. On discharge, baby weighed 1900 gram and had bowel frequency of approximately 10 times a day.

On follow up, he was given trial of various modalities of treatment like antimotility drugs (loperamide, codein) goat milk , special formula (nova sure), cholestyramine.

Now with these medications, the frequency of stools is controlled (4 to 5 times) with slow but consistent weight gain. Though he needed two ICU admissions in last 5 months for severe dehydration secondary to acute gastroenteritis.

The future options awaited for treatment include intestinal augmentation surgery and small bowel transplantation.

6. Case of Syndromic Baby Duodenal with Obstruction

Swati M, Kamana B, Manoj, Prem Sheth, Ramadwar

We report a case of a syndromic child with subacute duodenal obstruction which on investigation was of unknown aetiology, turned out to be annular pancrease on exploratory laparotomy.

One and half month old male child presented to our faculty with history of bilious vomidting. The baby was full term IUGR who needed 19 days NICU stay i/v/o syndromic features with an occipital swelling. Investigation revealed occipital meningomyelocoele with cervicomedullary junction focal diastomatomyelia. 2-D echo showed small 3 mm OS ASD with left to right shunt. Further karyotyping showed trisomy 8 only in 1 field which was considered to be insignificant according to genetic laboratory.

On examination baby was undernourished and dehydrated. He had dysmorphic features like short, webbed neck, generalised stiffness of body, hyperextended neck with small occipital swelling, u/l undescended testis. Abdomen was soft without any lump or peristaltic movements. Baby had metabolic alkalosis with dyselectrolytaemia.

Congenital hypertrophic pyloric stenosis (CHPS) was suspecteted. But investigations ruled out CHPS, hence neurological aetiology was given a thought. Baby was given a trial of centrally acting antiemetics i/v/o suspected chemoreceptor dysfunction which was effective only temporarily.

Case reviewed with all investigations suggestive of subacute duodenal obstruction of unknown aetiology and posterolateral diaphragmatic hernia as a incidental finding.

Exploratory laparotomy done which disclosed the cause of symptoms. Annular pancreas was found as culprit which was associated with non rotation of gut. Duodeno - duodenostomy was done with repair of diaphragmatic hernia and apendicectomy.

7. Progressive diaphyseal dysplasia with cytopenias - Case Report

Swati M, Rashmi Dalvi

A 5 year old male child was brought to us with severe transfusion dependent anaemia, symptomatic thrombocytopenia with limb stiffness and failure to thrive. On examination, child was marasmic with evidence of spontaneous bleeding lower limb stiffness and tenderness with moderate hepatosplenomegaly.

Prior to coming to Bombay Hospital, following repeated hospitalisation and extensive investigations, child was diagnosed as a case of Camurati-Engelmann disease (Progressive diaphyseal dysplasia) with HbD trait and was treated outside with repeated transfusions.

At our hospital, on review of the case and literature he was put on steroid therapy (initially prednisolone then deflazacort) to which he showed a brisk response with complete reversal of all haematologic and systemic abnormalities. Over last five years of follow up child has shown a sustained response to treatment and markedly improved quality of life with minimal side effects of treatment.

The pathogenic role of TGF - beta family mutations in skeletal dysplasias and haemopoietic dysfunction is outlined. Also the role of deflazacort as a safe and efficacious alternative