D.N.S. NEWSLETTER

Official Publication of Delhi Nephrology Society

Vol. I, No. 1 **2010 (January –March)**

From the editor's desk

Delhi Nephrology Society in its recent meeting had decided to restart the publication of DNS Newsletter. I am grateful to the Society for giving me the opportunity to take up this task. It gives me immense pleasure in presenting this newsletter to you. It is proposed to bring out the newsletter on quarterly basis. The newsletter aims to bring to you news and views which are of concern to the nephrology fraternity. It shall contain information regarding various forthcoming events and interesting cases which are presented in various meetings of Delhi Nephrology Society and encountered in day to day practice. It is my humble request to all the members of the Society to send news items / clippings / snippets / advertisements / interesting cases / by e-mail to the undersigned at "opkalra1@yahoo.com". Members are requested to give their suggestions to improve the quality and content of the newsletter.The success and regular release of the newsletter shall be possible with your active support.

Prof. O.P. Kalra
Editor, DNS Newsletter

DELHI NEPHROLOGY SOCIETY

Wishes all the members a Happy and Prosperous New Year

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COUNTRY'S FIRST SUCCESSFUL COMBINED LIVER AND KIDNEY TRANSPLANT IN AN ADULT WITH TYPE 1 PRIMARY HYPEROXALURIA

Departments of Nephrology and Renal Transplant Surgery, Sir Ganga Ram Hospital, New Delhi

Clinical History

A 33-year old female patient presented to Sir Ganga Ram Hospital with history of vomiting on and off 8 months back with pedal edema, dyspnea on exertion and weight loss. There was no history of fever, dysuria, oliguria, graveluria, renal colic or hematuria. She was married, non-consanguineous and had 2 children. She was evaluated at her native place and was found to have advanced azotemia. Family history revealed that her elder sister had died at the age of 18 years due to renal failure (? cause). She was nondiabetic, nonhypertensive and did not give any history of coronary artery disease, tuberculosis or renal calculus disease. She had normal delivery 6 years back and had delivered second baby by LSCS 11 months back.

Physical examination

Examination revealed lean and thin female having BMI of 14. She was tachypneic and her blood pressure was 110/70 mmHg in right arm supine position. She had anemia and bilateral pedal edema and there was no icterus, cyanosis, or lymphadenopathy. Systemic examination revealed evidence of fluid overload and presence of systolic murmur over mitral area. Rest of the systemic examination was normal.

In view of subacute presentation of renal failure and significant family history of renal failure in sibling at a young age, renal biopsy was done which revealed chronic tubulo-interstitial disease with extensive deposits of calcium oxalate crystals in the tubules and interstitium ? Oxalosis.

Genetic testing was done at Mayo Clinic USA, which gave the moleculo-genetic diagnosis of Type 1 Primary Hyperoxaluria Both AGXT gene's alleles had c.33_34 ins C mutation (homozygous) (non-responsive to pyridoxine-B_6 treatment).

Investigations

Hemoglobin 7.1 g/dl, TLC 7600/cmm, platelets 2.21 lacs/cmm, ESR 23 mm after 1 hr. BUN 12 mg/dl, serum creatinine 4.1 mg/dl, Na+ 140 mEq/l, K+ 5.3 mEq/dl, glucose 98 mg/dl, Ca^{2+} 8.2 mg/dl PO_4^{---} 1.6 mg/dl, serum bil (total) 0.5 mg/dl, bil (direct) 0.1 mg/dl, SGOT 22 IU/l, SGPT 24 IU/l, serum proteins - total 7.1 gm/dl, albumin - 3.6 g/dl, alkaline phos 207 IU/l, GGT 25 IU/l Urine R/M proteins ++, 10-15 wbc/hpf USG abdomen - B/L medical renal disease, HbsAg Negative, HCV Negative, HIV Negative, DTPA scan - B/L non-obstructed kidneys, X-Ray chest - cardiomegaly

ECG - LVH, Echocardiography - LVEF - 22%, No LV RWMA, severe LV dysfunction, moderate MR, mild PAH. Thyroid profile, iron profile coagulation profile, tumor marker study and immunological markers were normal.

Coronary angiography was done which revealed normal coronary arteries. Stress echocardiography test was negative for reversible ischemia.

Treatment and Course

She was diagnosed as a case of Primary Hyperoxaluria Type-1 (pyridoxine resistant) with end stage renal failure and cardiomyopathy. She was initiated on intensified hemodialysis as her plasma oxalate level was - 97.3 μmol/l (Normal levels: Adults < 5.4 μmol/l) and detailed work up for combined liver and kidney transplant was done.

Liver biopsy was done which showed normal lobular architecture and portal tracks showed mild chronic inflammation.

Since hyperoxaluria is a hereditary disease, donors must be from other than recipient's family. Two cousins of the husband of the patient were selected as donors, one for kidney and the other for liver. Detailed evaluation of both the donors was done regarding fitness for surgery. Approval from Authorization Committee was taken. Immuno-suppression with daclizumab, methyl prednisolone, tacrolimus and mycophenolate mofetil was given. Intra-operatively, native liver exploration was done and donor's left lobe hepatectomy was done. Orthotopic liver implantation was done. In spite of intensive dialysis, her plasma oxalate levels were ~ 90 μmol/l. Intra-operative CRRT was used to lower the oxalate burden on the donor kidney. Left donor nephrectomy was done. Donor kidney had single renal artery, vein, and ureter and was transplanted in the right iliac fossa.

Post-operatively, urine output started immediately and was profuse. Patient was hemodynamically stable and was shifted to Liver Transplant ICU on 2nd post-operative day and was extubated. She achieved good graft function with urine output about 4 litres per day. Next day she had leucocytosis and was started on voriconazole, ertapenam, linezolid and colistin empirically. She responded well. She developed fluid overload due to mitral regurgitation which responded very well to diuretics. She did not require any dialysis support. She achieved normal liver (SGOT/SGPT - 69/84 IU/l) and kidney (serum creatinine - 0.7 mg/dl) graft function over the next week. Repeat investigations revealed : plasma oxalate – 8.0 μmol/l, 24 hr urinary oxalate – 21.35 mg/day. 2D echocardiography – LVEF 30%, mild TR, MR. She was discharged in stable condition on 12th post-operative day on tacrolimus 0.5 mg bid, MMF 250 mg bid and prednisolone 30 mg OD.

During third week of follow up, she had transient mild liver graft dysfunction with good kidney graft function. Liver biopsy was done which showed mild acute rejection, probably because of sudden fall in tacrolimus levels on withdrawal of voriconazole. She responded to steroids and is presently doing well.

To summarize, this 33 year old female with Primary Hyperoxaluria Type 1 with end stage renal failure underwent successful combined liver and kidney transplantation with good graft function of both organs and this also resulted in significant improvement of cardiomyopathy.

CONGRATULATIONS

International Society of Nephrology (ISN) Honours Three Nephrologists

Three eminent nephrologists were awarded the celebrity status of Honorary Life Membership of the International Society of Nephrology during the World Congress of Nephrology at Milano, Italy from May 22-26, 2009. These included Prof. William Couser of USA, Prof. Rashad Barsoum of Egypt and Prof. Kirpal S. Chugh, Emeritus Professor of Nephrology, PGIMER, Chandigarh.

The awards were presented by Prof. Eberhard Ritz, President of the International Society of Nephrology on the 25th May 2009. Dr. Chugh was honored because of his exceptional contribution to the International Society of Nephrology and the field of Nephrology worldwide.

PADMA SHRI AWARD

Dr. A.K. Bhalla
Senior Consultant and Vice Chairman, Department of Nephrology, Sir Ganga Ram Hospital and President, Delhi Nephrology Society

Dr. A.K. Bhalla, Senior Consultant and Vice Chairman of Department of Nephrology, Sir Ganga Ram Hospital was awarded 'Padma Shri' in the Category of 'Medicine' for the year – 2010 by Hon'ble President of India.

Dr. Bhalla is currently **President** of Delhi Nephrology Society and is Director Dialysis programme at Sir Ganga Ram Hospital, and Member of Board of Management.

He pioneered the technique of Home Peritoneal Dialysis in the country in 1989 and has maximum number of patients on Peritoneal Dialysis in India. He has been the former Secretary General of Peritoneal Dialysis Society of India.

Apart from this, he is involved in various charitable activities by arranging free medical camps and has opened a charitable hospital in West Delhi for poor and needy patients.

ANNUAL CONFERENCE OF DELHI NEPHROLOGY SOCIETY

ACUTE KIDNEY INJURY REVISITED

27-28 Feb 2010

Army Hospital (Referral & Research)
Delhi Cantt.

PROGRAMME

Saturday, 27 Feb 2010

1330-1400 Registration

1400-1445 Inauguration by the Chief Guest- **Lt Gen Naresh Kumar, AVSM, VSM,** Commandant, Army Hospital (R & R)/ Felicitation ceremony of **Dr A K Bhalla, Padma Shri**/ DNS President's Address/ DNS Secretary's Annual Report/ Organizing Secretary's Vote of Thanks

1445-1530 Keynote Address- **EVOLVING CONCEPTS IN ACUTE KIDNEY INJURY- Prof Vijay Kher,** Consultant Nephrologist, Medicity Hospital.

Charpersons- Maj Gen A S Narula, VSM/ Prof SC Tiwari

1530-1615 Inauguration of Scientific Exhibition/ High Tea

1615-1715 **SESSION I**

Chairpersons- AVM K M Suryanarayana, VSM / Dr (Col) A Mishra, VSM

Lead Discussants- Dr Dinesh Khullar / Dr Sunil Prakash

1. Tumour Lysis Syndrome- Oncologist's perspective- **Col AK Dhar**, **VSM**, HoD Oncology, Army Hosp (R & R)
2. Hepatorenal Syndrome- Gastroenterologist's perspective- **Gp Capt B Nandi,** HoD Gastroenterology, Army Hosp (R & R)

2000-2300 **BANQUET**

Sunday, 28 Feb 2010

0900-1100 **SESSION II**

Chairpersons- Brig P P Varma, SM/ Prof O P Kalra

Lead Discussants- Dr S Saxena/ Dr Umesh Nautiyal

1. Rhabdomyolytic AKI , **Dr Ravi Bansal**, PSRI
2. Drug Induced AKI, **Dr Sandeep Mahajan,** AIIMS
3. HUS, **Dr Arvind Bagga**, AIIMS
4. Radiocontrast Induced AKI,**Dr Sanjiv Gulati**,Forts Group

1100-1130 **Tea**

1130-1330 **SESSION III**

Chairpersons- Dr P D Gulati/ Dr Sanjay Agarwal

Lead Discussants- Dr Sham Sunder/Dr S Jasuja

1. IV Hemolysis induced AKI, **Lt Col Sanjeevan Sharma**, Hematologist, AH (R & R)
2. Sepsis syndrome and AKI, **Dr N P Singh**, MAMC / LNJP Hospital
3. Malaria and AKI, **Col J S Bishnoi**, Sr Adviser Nephrology, AH (R & R)
4. Malignant Nephrosclerosis, **Dr S Bhowmik,** AIIMS

1330-1345 **CONCLUSION/ VALEDICTORY FUNCTION**

1345-1500 **LUNCH**

DELHI NEPHROLOGY SOCIETY

Programme for World Kidney Day
11TH March, Thursday

Morning Session (9 am – 12 Noon)
Public Awareness programme including Screening Programme
(Venue Individual Hospitals)

Afternoon Session (1-2 pm)
World Kidney Day March
(Venue Jain Ashram, Darya Ganj to Raj Ghat)

Evening Session (7-9 pm)
Panel Discussion on
"Preventing Kidney Disease –Role of Physicians"
(Venue Auditorium, MAMC),
followed by Dinner

'Protect Your Kidney - Control Diabetes'

In 2010 *our fifth World Kidney Day* our campaign will focus on diabetes, the most common cause of kidney failure. **It is important that all IFKF Member organisations update their WKD logo on their website, to reflect and be recognised as a Member of the 2010 campaign.**

World Kidney Day (WKD) is a global health awareness campaign focusing on the importance of our kidneys and aims to reduce the frequency and impact of kidney disease and its associated health problems worldwide. *The campaign is celebrated every year on the second Thursday of March.*

WKD encourages everyone to learn more about their amazing kidneys and to raise awareness of the fact that that kidney disease is **common, harmful and treatable**.

In 2009 - *our fourth World Kidney Day* - we highlighted the importance of high blood pressure as one of the key symptoms and causes of Chronic Kidney Disease (CKD) and was a formidable success, with 370 different events taking place in 100 countries and territories across 6 continents. Participating organizations around the world issued a call for action to measure and manage high blood pressure and organised screening events to detect CKD.

For further info, to ask for assistance in organizing activities or inform the IFKF and ISN about activities you are planning for 2010, or to make suggestions for future initiatives to support WKD, contact:

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CASE OF DISSEMINATED NOCARDIOSIS IN A RENAL TRANSPLANT RECIPIENT

A 16-year old female, case of end stage renal disease underwent cadaveric renal transplant on 7th September 2008. Her immunosuppression consisted of induction with antithymocyte globulin followed by tacrolimus, mycophenolate mofetil and prednisolone. Four months post-transplant, patient developed low grade intermittent fever, cough with mucoid sputum and pleuritic chest pain. Clinical examination revealed ill looking, febrile patient having pulse rate 116/min and blood pressure 120/70 mmHg. Chest examination revealed left infrascapular crepts and pleural rub. Rest of the systemic examination was normal.

Investigations revealed normal blood counts and liver function tests. On chest X ray multiple non-homogenous opacities were seen in right middle and left middle and lower zones (Fig. 1). CT chest revealed bilateral areas of consolidation with halo sign in upper lobes (Fig.2). Broncho-alveolar lavage and transbronchial lung biopsy were not contributory. CT guided FNAC from lung lesion yielded gram positive branching, filamentous rods, which on Grocott's stain was suggestive of Nocardia species (Fig. 3).

The patient was started on cotrimoxazole, linezolid and parenteral meropenam. While on antibiotic therapy, she developed altered behaviour.There was no focal neurological deficit or signs of meningeal irritation. Fundus examination was normal. MRI brain was suggestive of inflammatory granuloma in left caudate nucleus and posterior frontal lobe and arachnoid cyst in right middle cranial fossa (Fig. 4). She was continued on cotrimoxazole and immunsuppression was modified according to drug levels. Patient is on our follow up for the last 9 months and is receiving cotrimoxazole. The pulmonary and skin lesions have resolved and repeat MRI brain has also revealed resolving lesions.

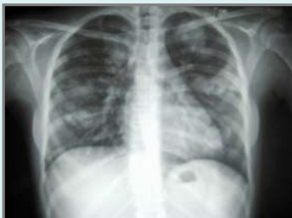

Fig. 1. Chest X Ray PA view showing bilateral non-homogenous opacities

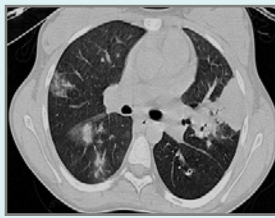

Fig. 2. CT scan of chest showing bilateral areas of consolidation with halo sign

Fig. 3. Grocott's stain showing filamentous and branching rods suggestive of nocardia

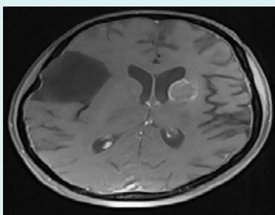

Fig. 4. MRI of brain showing inflammatory granuloma in left caudate nucleus and posterior frontal lobe and arachnoid cyst in right middle cranial fossa

On behalf of Delhi Nephrology Society, the editorial board expresses its gratitude to M/s. Panacea Biotec Ltd. for facilitating publication of the Newsletter.

Annual Conference of Indian Academy of Nephrology

Preventive Nephrology Congress at Sikkim

5th Annual Congress of Indian Academy of Nephrology (IAN) & Preventive Nephrology (PN) will be held at Gangtok, Sikkim from 8-10th April'2010. IAN – PN is a National Body established to advance the cause of Renal Medicine & Preventive renal disease in particular. Head Office is located at All India Instituteof Medical Sciences, New Delhi. It welcomes all members of Indian Society of Nephrology & Association of Physicians of India, Urology Society of India & Indian Society of Organ transplantation, nephrology students to attend, participate in conferences. Its principal motto is prevention of chronic kidney disease, besides training & updating on recent topics & practical aspects in kidney disease & its management. State of the art lectures will be delivered mostly by Indian speakers. To register as member of IAN – PN please contact Honorary Secretary Prof. S K Agarwal, HOD, Nephrology, AIIMS, New Delhi. E-mail: skagarwal58@yahoo.co.in, Telephone: 9811434836. Welcome to Gangtak (Sikkim), conference starting on 8th April'2010. Register early.

Dr. S C Dash,
President, IAN – PN

Annual Conference of Indian Society of Nephrology

North Zone Chapter at Manesar

(Brief Report)

This year's Annual Conference of the North Zone Chapter of the Indian Society of Nephrology was held from 22nd to 24th January. The venue was the scenic Heritage Village and Resorts, Manesar set in a world of ethnic grandeur. The conference was attended by 150 delegates, despite the unpredictable cold, foggy, winter weather. It was after a long time that this conference has witnessed such an enthusiastic participation

The conference was notable for its absorbing scientific programme which covered the Recent advances in Nephrology. For the first time, it included interactive sessions like Meet the Professor, Challenging Case Scenarios, debates and PG Quiz. The scientific deliberations were capped by a cultural extravaganza that left the audience spellbound and asking for more of such conferences in the future. The credit for the success goes to the efforts put in by each member of the Organizing Committee lead by the dynamic Dr Vijay Kher.

Dr Sanjeev Gulati
Organising Secretary

Two members of Delhi Nephrology Society, Prof. N.P. Singh and Prof. O.P. Kalra have been elected members of the newly constituted Delhi Medical Council.

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