

Report of Activities at St John's Medical College and Hospital during the 12 month IPNA fellowship

IPNA Fellow: Dr. Tarannum Khondaker

Centre of training: Department of Pediatric Nephrology, St John's Medical College and Hospital, Bangalore, Karnataka, India.

Duration of fellowship training: from 17th September, 2015 to 16th September, 2016

CLINICAL EXPERIENCE AND PATIENT CARE:

i) Outpatient Clinics:

This is a leading Pediatric Nephrology Centre in South India. It conducts very busy routine outpatient clinics (OPD) thrice per week running from 9am to 1pm. Everyday around 50-70 patients are seen during each clinics by consultants. I have come across variety of cases pertaining to pediatric nephrology, including difficult nephrotic syndromes, acute glomerulonephritis, tubular disorders, secondary hypertension, UTI etc. During these sessions, I have assisted consultants, and have tremendously benefited from their knowledge and experience in managing such cases.

It also conducts one dedicated CKD clinic and one separate Nephrology-urology clinic weekly. In CKD clinics I was involved in the primary workup for diagnosis of the underlying kidney disease and further management of such children. In conjunction with medical social worker, I was involved in the counseling and guidance of parents regarding the diagnosis and decision making for further treatment plans. I have also been exposed to several cases of CKD children who come for follow-up. I have been responsible for evaluation of children with end stage renal disease for pre transplant workup.

I had opportunity to follow number of post renal transplant patients, their post-transplant complications and management.

In Nephrology-Urology clinic, I had the opportunity to deal with a variety of nephro-urology cases: urolithiasis, VUR, PUJO, CAKUT, complicated UTI, neurogenic bladder, enuresis, obstructive uropathy etc. I worked in consultation with pediatric surgeons and evaluated and managed these children.

ii) Inpatients:

Going by the spectrum of cases, our patients would span over the 20 bed pediatric nephrology general wards, Pediatric Intensive Care Unit (PICU) and pediatric surgery ward, it also includes references from the department of general pediatrics, neonatology unit, and paediatric surgery. A twice daily rounds with in-depth clinical discussions regarding the admitted patients was a routine practice, conducted under the guidance of Dr Arpana Iyengar, and the other consultants in the team. We learned various aspect of Pediatric Nephrology, starting from history taking to clinical examination and then management of various patients in a systematic way. During these sessions, we were exposed to the art of counseling of patients, for that I would like to thanks the presence of a full-time medico-social worker in the department. For the ideal care of patients, specific nurses were responsible for CAPD, HD patients which helped me to gain skill about intense management of such patients. Regular visits to the hemodialysis unit and attending to CAPD patients acquainted me to the problems which are unique to these patients, and the procedure of RRT per se. I have been seen all the possible emergencies while attending to the PICU patients, such as severe acid-base disturbances, dyselectrolytemias, ARF (AKI), hypertensive crises, etc. It is one of the very few centers in India which undertakes pediatric renal transplants on a routine basis. It is a rather well organized effort, with a team comprising pediatric nephrologists, adult nephrologists, transplant surgeons, transplant nurses, Medical Social Workers, nutritionists, etc. Thus I had the opportunity to learn about various aspect of Pediatric Renal Transplant including

- Indications for renal transplant
- Pre-transplant donor and recipient evaluation and work up
- The surgical procedure of renal transplant

- Immediate post-transplant care, and complications expected
- Transplant related immunosuppressant
- Long term care of transplanted children, including growth monitoring and social issues

I was involved and responsible for pre-transplant work-up of few patients and their active management during transplant, including operation theatre and post-transplant period under close supervision of senior consultants, which has given me enormous confidence in providing care for such patients in the future. I was fortunate enough to observe in my training period two special cases of renal transplantation for low weight recipients (<10 kg) which was conducted by special transplant team.

ACADEMIC ACTIVITIES:

I must say, thanks to Dr Arpana Iyengar and her team's dedication, efforts with a focus on developing the core skills, while at the same time help me to gain the necessary knowledge,. All consultants are dedicated to and passionate about Pediatric Nephrology. The following academic activities were undertaken on a regular basis:

- Daily bedside clinical case discussions pertaining to patient management.
- A grand round by consultants for each patient – once a week. It consists of bedside discussion of cases or topics, various pathophysiological scenarios, theoretical aspects and their practical implications in given scenarios.
- Approach to counseling of a patient.
- Academic classes twice a week (intradepartmental, interdepartmental with other departments like pediatric surgery, pathology, endocrinology)
- Journal clubs
- Case presentations
- Histopathology meetings once a month with department of pathology, which helped me understand renal disorders from a pathologist's perspective and clinically correlate the same.

- Once a month discussion about various aspects of HD, CAPD and transplant patients.
- Once a month telemedicine sessions with satellite centers involving case discussion and histopathological discussions.

Our center has an excellent academic collaboration with Montreal Children's Hospital, Montreal, Canada as part of SRC program under the auspices of ISN GO.

I would like to give special thanks to Dr Arpana Iyengar for giving me opportunity to attend a hands on training about intervention in Paediatric Nephrology in CMC Vellore, which is one of the renowned centres in India.

PROCEDURES:

This is a very busy department and as a part of the training program, I have had ample opportunity to develop the necessary skills in the following procedures

- Percutaneous USG guided renal biopsy
- Acute peritoneal dialysis catheter insertion, procedure of peritoneal dialysis, and care of a patient on PD.
- Acute hemodialysis access insertion, hemodialysis prescription, initiation of HD and care thereafter.
- Care of CAPD patients, introduction to the surgical technique of CAPD catheter insertion; the procedure and interpretation of peritoneal equilibration test (PET)
- Plasma Exchange
- CRRT (Continuous Renal Replacement Therapy)

RESEARCH ACTIVITIES/PUBLICATIONS/ORGANIZATIONAL SKILLS:

I would like to express my gratitude to the faculty for giving me opportunity to be involved in a study titled "ambulatory blood pressure monitoring (ABPM) in renal transplant recipients in a developing country --- a crucial tool for hypertension

management.” This study was selected as poster presentation at 17th congress of IPNA, Brazil in September 2016.

IMPACT OF TRAINING:

This 1 year tenure at St John’s hospital is one of best of my life.

Apart from Pediatric Nephrology, there are many other aspects I have learnt and it has created tremendous impact on me. This is one of the examples of “How to develop a successful advanced academic centre in medical field” in resource deprived country. During this training period, Dr Arpana Iyengar was my constant guide, and a source of inspiration. She has conceived and nurtured her department very well.

All consultants are passionate about Pediatric Nephrology and because of them this is a one of premium institutions for Pediatric Nephrology in India. The department was very homey, and would constantly encourage me in whatever I wished to pursue, constantly striving to get the best out of me. It was more like a family to me, during this 1 year away from home.

It shall henceforth be my constant endeavor to live up to their expectations. I am sure, that with the knowledge that I have gained during this 1 year; I will definitely be able to make a significant difference to the people of my country, who so far being deprived from proper renal care are referred to centers outside the country for pediatric nephrology care, much to their inconvenience. I shall use every opportunity to sensitize my colleagues in pediatrics to the importance of early diagnosis and appropriate management of renal disorders in children.

No word would be complete without my thanking IPNA, for a having granted me the opportunity and the means to successfully complete this training in pediatric nephrology, of which I have been so desirous. I look forward to their continued co-operation in the years to come.

FUTURE PLANS:

Having successfully completed this 1 year IPNA fellowship in pediatric nephrology, I now feel more confident to initiate comprehensive pediatric nephrology care with a dedicated pediatric dialysis centre in Bangladesh. There are many adult nephrology centers and few pediatric nephrology centre in the Dhaka city but which is not adequate for this large amount of renal patients. Also there are no facilities or expertise for dealing with pediatric dialysis dependent patients. At present I am working in a private medical college and hospital, where I am the only Pediatric Nephrologist and my plan is to develop a comprehensive pediatric nephrology unit with dedicated pediatric dialysis centre. I feel this fellowship training will help me in better management of patients with renal disease and also to cut down on the referrals to other centers, which used to be inconvenient for patients. I also intend to organize awareness camps with help of local NGO's in regard to childhood renal disorders.

I intend to educate postgraduate students on management of children with kidney diseases and will try to spread awareness on early detection of renal disease in children, as well as the management of common pediatric renal diseases, by delivering talks at CMEs, and involving in panel discussions or similar forum. I shall be in constant touch with the Local BPA (Bangladesh Pediatric Association) for the same.

In all this, I seek help and encouragement from my mentor, Dr Arpana Iyengar, and IPNA. I shall be in constant touch with Dr Arpana regarding progress made by me in this regard, and I am sure, she too will always be with me in my endeavors.

With warm regards,

Yours Sincerely,

Dr Tarannum Khondaker
Anwer Khan Modern Medical College and Hospital
Dhaka, Bangladesh