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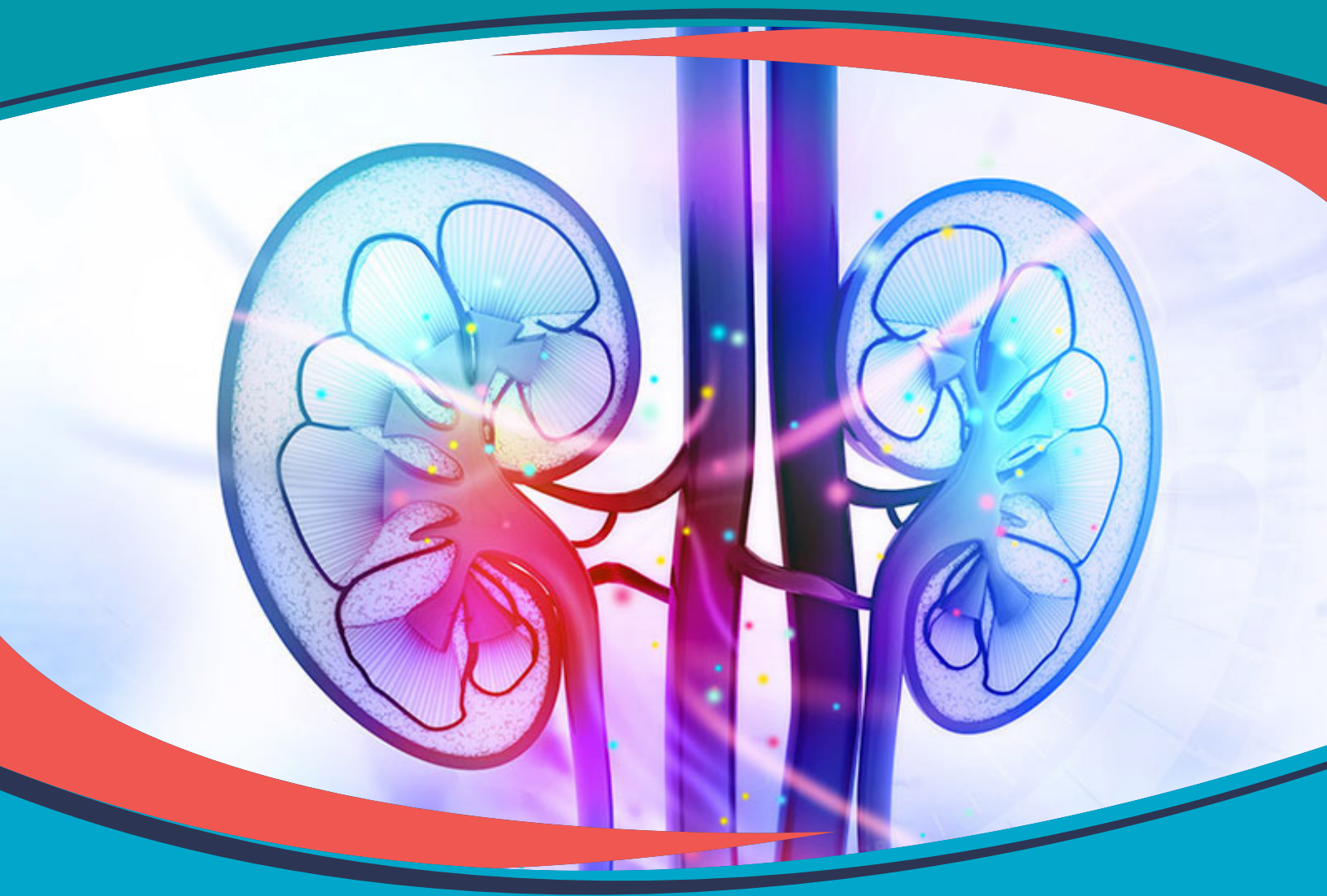
HYDERABAD NEPHROLOGY FORUM

HYDERABAD NEPHROLOGY FORUM

KIDNEY DIGEST



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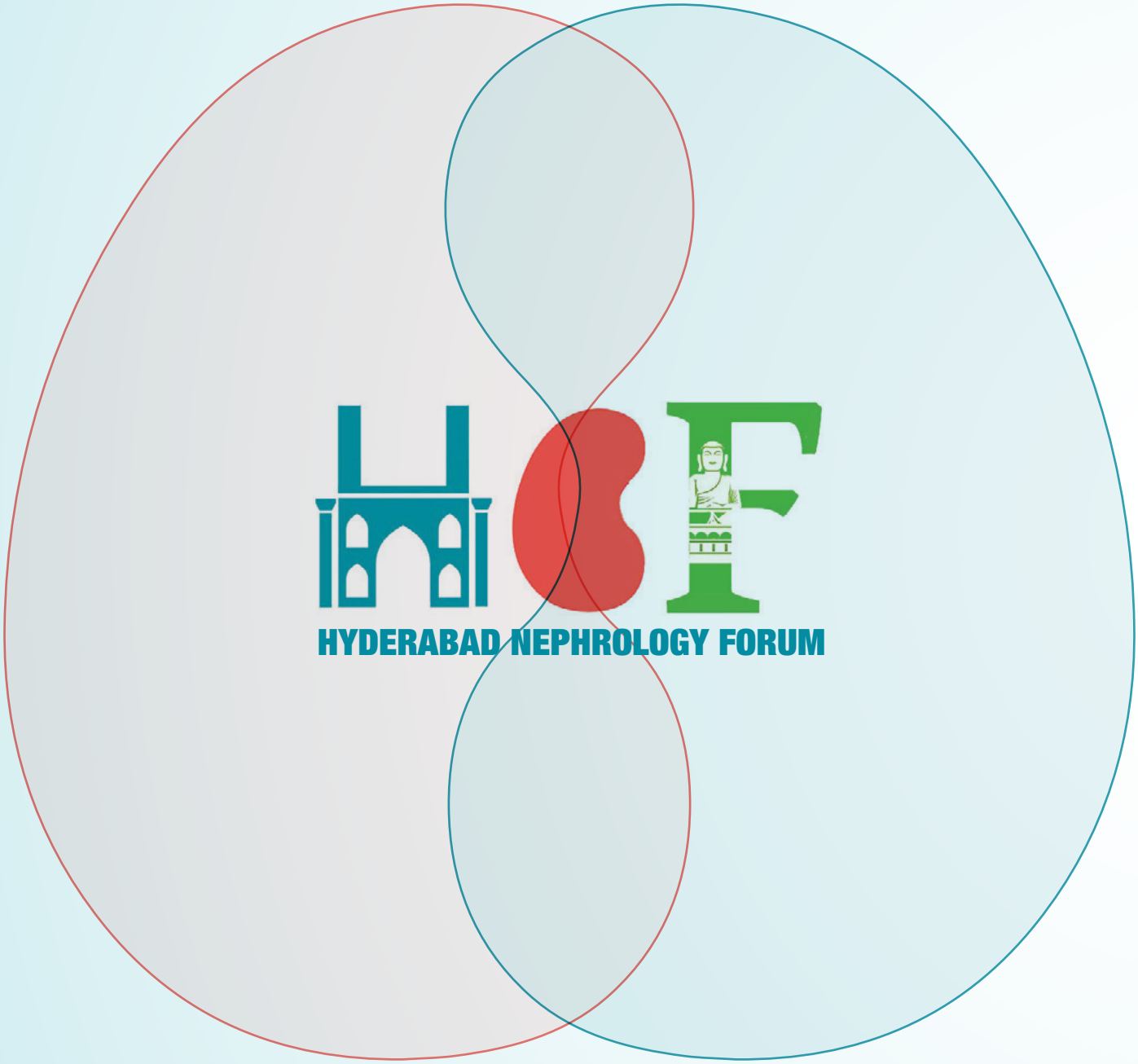

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Dr Praveen Kumar Etta
Consultant Nephrologist
TX Hospital
Banjara Hills, Hyd

Editorial

The previous issues of HNF newsletter the "Kidney Digest" were a great success and it attracted the interest of nephrologists, not only in Telangana, but across the country. It's been a wonderful platform to keep all the HNF members updated on the various activities, share achievements of HNF Members, and disseminate their publications in various scientific journals. Our intention to educate the Nephrology students is also fulfilled by discussing few interesting topics in the Newsletter. I would like to thank all the editorial board members, senior faculty, and advisory board of HNF for all the efforts in brining the quarterly issues of Kidney Digest successfully. In this Newsletter, we have included the application format for the research grant allotment to conduct interesting research projects in the field of Nephrology. This is introduced with the aim of encouraging research and innovation in the field of Nephrology from the HNF forum members. I am happy to know that our HNF members have contributed and participated in various National and International conferences such as World Congress of Nephrology, Bangkok, Thailand; Foundation Day Celebrations at SGPGI, Lucknow; Renal Transplant Symposium and AINU Transplant Conclave conducted in Hyderabad. HNF conducted an educational program on Peritoneal Dialysis with the workshop and hands on training conducted at NIMS, followed by a CME program in April 2023. HNF also started a training program on Biostatistics for Nephrology students once in every 2 weeks at NIMS auditorium. Students are benefitting a lot with all these educational initiatives from HNF board. I thank Dr. K Sampath Kumar and Dr. Tarun Jeloka for giving a valuable message to the forum members in this issue. I sincerely thank Dr. Swarnalata Gowrishankar for providing recent advances and summarizing important topics in the field of Renal Pathology.

Sir William Osler, the "Father of Modern Medicine" was known to say, "Listen to your patient; He is telling you the diagnosis" - Dr. William Osler

Dr K Sampath Kumar, MD DM FRCP FASN
Senior Consultant Nephrologist
Meenakshi Mission Hospital, Madurai

Message from **Dr K Sampath Kumar** - Hyderabad Reminiscences

As I was reading the Hyderabad Nephrology Group's Newsletter, my thoughts drifted away to the time when I had initiated the first Newsletter for the Southern Chapter of ISN in the year 2006 when I assumed office as the Secretary.

The baton was passed onto me from my good friend Dr. Urmilaby a booming voice over phone from Prof. Gopal Kishan who was the king-maker then.

I fondly recall my first outing at Hyderabad ISNSC conference which was splendidly organized by Prof. Pradeep Deshpande. I learnt from him how to be cool in the midst of a tense conference. Whenever there were some heated arguments, he would draw me out for a coffee for relaxation! The President was Prof. Girish Narayan who always gave me friendly guidance. Finalising the scientific content was not very complex then and choosing the faculty was easier due to the relatively small membership of ISNSC. Another senior who showered her love and affection was Prof. Anuradha. She always had a word of encouragement for whatever I did. So was Prof. Dakshinamurthy with whom I had interacted a lot during my tenure as the secretary of PDSI. I have to acknowledge the influence of Dr.K.S.Nayak on me. He always took a contrarian view and refused to walk the beaten path. Taking a cue from him myself and Dr.Bala conducted the first live work shop of Interventional Nephrology during the Southern Chapter meeting in the year 2009. The live streaming of the procedures is captured in the following Photograph.

INDIAN SOCIETY OF NEPHROLOGY
SOUTHERN CHAPTER

July 2009 NEWS LETTER YEAR 2 VOLUME 5

Dear Member,

Greetings from Madurai!

The setting of Vivekananda rock and towering statue of Thiruvalluvar looming large close to the conference venue gave a unique atmosphere to the 29 th ISNSC conference at Kanayakumari which was a well attended on Feb 6-8. Dr.Bala and his team did a commendable job of organising a conference away from their hometown. The workshop on Interventional nephrology with two way interactions was lively. In future, such workshops will add variety and sustain the delegates interest in the proceedings. A video CD of the

Interactions among the delegates were friendly and mutually enriching. The quiz programme was well

The Apex Foundation's annual update at Mumbai held in 2016 drew me close to Dr.Rajasekhar whom I refer to as the Chakravarthi (meaning emperor in Tamil) of intensive care Nephrology. Dr.Manisha, Dr. Gangadhar, Dr. Manjusha and Dr.Sree Bhushan have beautifully stepped into the shoes of seniors and made their indelible marks in both administration and academics.

Hyderabad is dear to me for one more reason. My first entry into Hyderabad in 1985 was as a medical student when the All India Inter Medical Sports events were held in Nizam's. I was a final year student at Madurai Medical College then and captained the Table Tennis team. I defeated much fancied opponents and went up to semifinals where my dream run was over. The electric atmosphere of the events is still ever green in my memory.

I congratulate the Present team for the energy, enthusiasm and effulgence they bring to Nephrology and wish them good luck.

Dr Tarun Jeloka

HOD, Nephrology, Manipal Hospital,

Baner, Pune

Message from Dr Tarun Jeloka

So, don't get surprised friends. I have an old association with Hyderabad Nephrology. The tree has bloomed with several new buds on its branches. The entire team is electric and energetic.

I am very pleased to write a feedback on "Newsletter" of HNF. I have gone through both the editions of last Newsletters and was extremely impressed by its content. It is a great snap shot of the world of Nephrology which can be seen in just few minutes. It saves a lot of individual time for any practitioner to update oneself. It is not only good for students but also for all age nephrologists to have a glimpse of recent advances in nephrology.

The 'Journal scan' and 'Practice changing updates' are my favorite. I could update myself quickly and read the full article of my interest. Others are also equally good like cases, Tx proceedings, Quiz etc.

One of my experience over last few decades is the carrying forward of this type of academic exercise. It needs lot of dedication and time which as a practicing nephrologist, is at times, difficult. I wish HNF and Dr Praveen Kumar Etta to maintain the quality as strong as it is now in future also.

Best Wishes to the entire team..

Dr Swarnalatha Guditi
Prof & Head, Dept of Nephrology NIMS
Secretary HNF

Message from Dr Swarnalatha Guditi

Hyderabad Nephrology Forum (HNF) is delighted to announce the thriving and vibrant atmosphere of our organization. With a commitment to enhancing knowledge and fostering professional growth, we conduct monthly academic activities that bring together nephrologists from across the region.

Our recent endeavors include theme-based workshops, such as the Perineal Dialysis workshop,

where experts shared their insights and experiences. We also organized a symposium on transplantation, shedding light on immunosuppressives. In addition, we held engaging case discussions, including a well-worked-up and managed case of C3GN from Khammam, which showcased dedication to effective patient care even in the remote areas in Telangana.

We are excited to introduce biweekly biostatistics classes, catering to the learning needs of trainees.

These classes provide valuable knowledge and skills for conducting research and analysis.
Furthermore, we take immense pleasure in announcing the availability of research grants for trainees. This initiative aims to support and encourage nephrologists in pursuing innovative research projects. The current issue includes the application details for the research grant.

In addition to academic pursuits, we recognize the importance of physical well-being. Thus, we regu-

larly organize fitness activities to keep all nephrologists fit and healthy.
Lastly, we are proud to share that HNF has been chosen as the host for the prestigious ISNSCCON 2024 conference, which will take place in Hyderabad. This opportunity highlights the recognition and trust bestowed upon our organization.
Hyderabad Nephrology Forum is dedicated to advancing the field of nephrology through a multidimensional approach, encompassing academia, research, and overall well-being.
We would like to appreciate Dr Praveen Kumar Etta and team in bringing issues of HNF Newsletter “Kidney Digest “regularly with all the updates and academic content.

Dr. Swarnalata Gowrishankar
Senior Consultant Pathologist
Department of Histopathology
Apollo Hospitals, Hyderabad

Renal Pathology Pearls

Utility of kappa and lambda light chain staining in immunofluorescence studies

In a resource poor setting, the question of whether the addition of kappa and lambda light chain (LC) stains to the panel of immunoglobulins (IgG, IgM, IgA) and complement (C3c and C1q) in immunofluorescence (IF) study, adds value often arises.

The light chain stains add value for the following reasons:

1. They complement the heavy chain stains and helps confirm their presence and the pattern of deposits. When both the light chains are present, even if variable in intensity, it confirms the polyclonal nature of the deposits.

2. Light chain stains are indispensable for the detection of monoclonal immune deposits where there is a light chain restriction, namely one light chain is present and the other absent.

The location, the texture and the patterns of staining are important as listed below.

1. In light chain cast nephropathy, which is a marker of myeloma, the casts show LC restriction (figure 1)

2. Proximal light chain tubulopathy: Here intracytoplasmic positivity, usually kappa light chains, is seen within the proximal tubular lining cells. These deposits may not be visible by routine IF stain and an unmasking procedure using enzymes like proteinase on formalin-fixed paraffin embedded sections may be necessary.

3. In AL amyloidosis, which is usually of the lambda LC type, the deposits show intense smudgy positivity corresponding to the amyloid deposits in the glomeruli, vessel walls and in the interstitium (figure 2). Note that AL amyloid can rarely be positive for only one heavy chain (IgG/IgA) or one heavy and one light chain.

4. Immunotactoid glomerulopathy and rarely fibrillary GN also show IgG with one light chain. The staining may resemble that seen in amyloid, AL type but it is confined to the glomerulus (figure 3).

5. Proliferative GN with monoclonal immune deposits (PGNMID) again resembles the above with staining typically for IgG and one light chain (figure 4). The distinction of the above four entities is made by congo red positivity with apple green birefringence for amyloid, DNAJB9 positivity for fibrillary GN, characteristic microtubular substructure for immunotactoid and absence of substructure in PGNMID. Amyloid and fibrillary GN have a fibrillary substructure on electron microscopy with the fibrils being narrower in amyloid.

6. Monoclonal immunoglobulin deposition disease (MIDD) of the Randall type again shows one light chain, usually kappa, with a linear staining pattern along the glomerular and tubular basement membranes, Bowman's capsule and vessel walls (Figure 5).

Are light chain stains necessary in all cases?

As the diagnosis of a monoclonal deposition disease is often unsuspected clinically and as light microscopy can have varying patterns which are not always distinctive, it is mandatory that these stains are done in all adult renal biopsies.

Can these stains be avoided in pediatric renal biopsies?

Though monoclonal deposits are rare in children, conditions like PGNMID occur and can be missed if these stains are not done. Besides, light chains mirror the heavy chains and are useful to confirm the presence and the pattern of the immunoglobulin deposits.

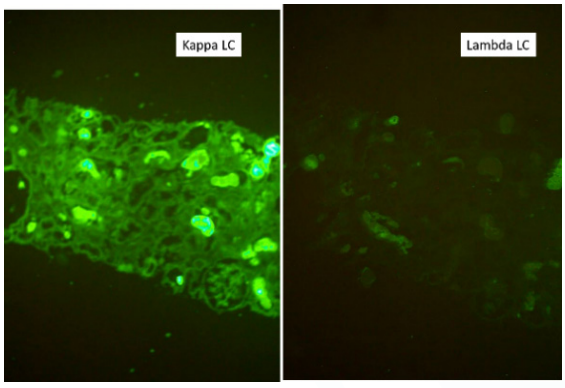

Figure 1: Light chain cast nephropathy with casts showing kappa light chain restriction.

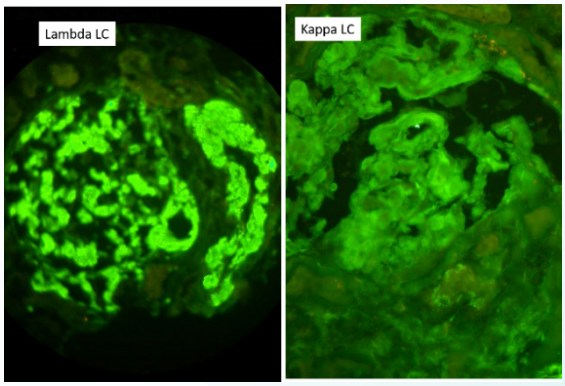

Figure 2: Amyloidosis with smudgy lambda light chains in the glomerulus and adjoining vessel.

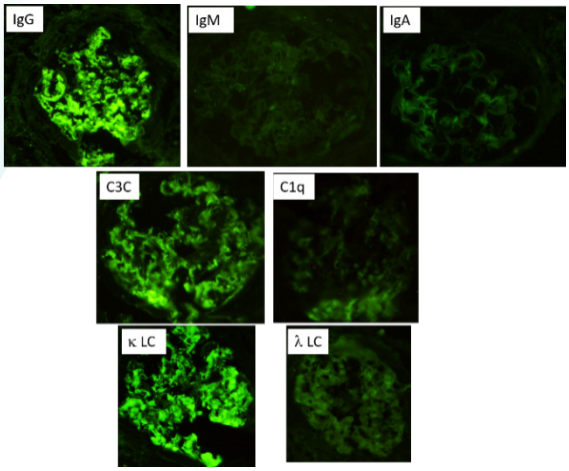

Figure 3: Immunotactoid GN showing positivity for IgG and kappa light chain.

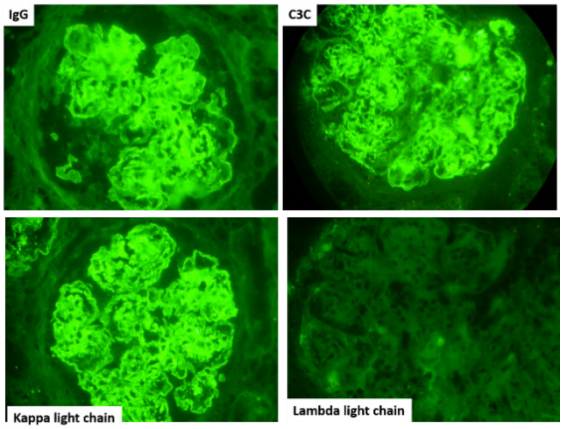

Figure 4: PGNMID showing strong peripheral and mesangial deposits of IgG with kappa LC restriction

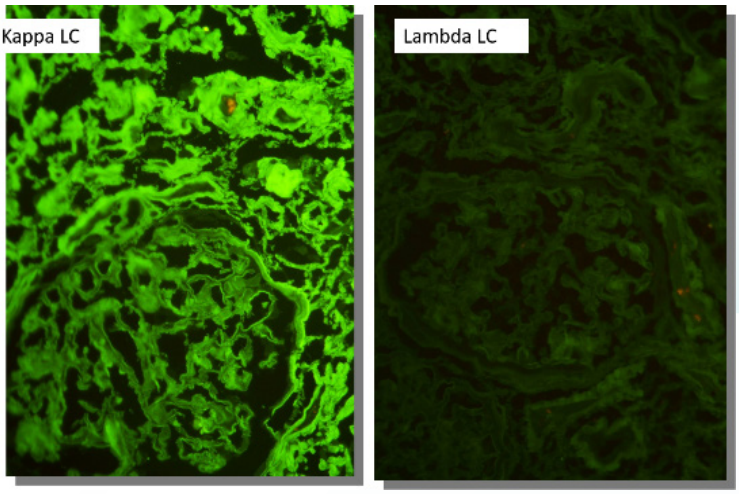

Figure 5: MIDD of the Randall type showing linear staining of kappa LC along GBM, Bowman's capsule and TBM. Lambda LC is completely absent.

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Teaching Topic

Anticoagulation in CKRT: RCA versus Heparin

Continuous kidney replacement therapy (CKRT) is a commonly used treatment modality in critically ill patients with severe acute kidney injury (AKI) or fluid overload. Anticoagulation is necessary during CKRT to prevent clotting within the extracorporeal circuit, which can lead to treatment interruption. Studies have shown that interruptions from clotting may reduce the total time on CKRT and increase patient morbidity. Two commonly used anticoagulation strategies in CKRT are regional citrate anticoagulation (RCA) and heparin anticoagulation. For patients without an increased bleeding risk or impaired coagulation and not already receiving effective systemic anticoagulation, the 2012 Kidney Disease: Improving Global Outcomes (KDIGO) guidelines suggest using regional citrate anticoagulation rather than heparin in patients who do not have contraindications for citrate; and suggested using either unfractionated or low-molecular-weight heparin as the alternative choice.[1] A recent Cochrane systematic review concluded that the available evidence does not support the overall superiority of any anticoagulant and the most effective anticoagulation options for CKRT remain to be determined.[2]

Regional Citrate Anticoagulation (RCA):

RCA works by chelating ionized calcium in the extracorporeal circuit, thereby inhibiting the coagulation cascade. It provides excellent anticoagulation, minimizing the risk of circuit clotting.

Since its regional anticoagulation i.e., citrate primarily affects the extracorporeal circuit, hence reducing the risk of bleeding complications. The majority of the calcium citrate complex is removed across the hemofilter. Any calcium citrate complex that remains postfilter is returned to the patient and indirectly metabolized to bicarbonate by the liver, kidney, and skeletal muscle. Calcium replacement is necessary to counteract the citrate-induced hypocalcemia and to replace the calcium that is lost in the effluent. RCA requires a strict protocol, which should include instructions for the infusion of citrate and calcium, for the composition of the dialysate/replacement fluid, and for intensive metabolic monitoring, including acid-base status, sodium, and total and ionized calcium levels.

Though citrate is metabolized in the liver, RCA can be used in most of the patients with mild to moderate liver dysfunction as the risk of citrate accumulation is minimal. Metabolic complications such as acidosis, alkalosis, hypernatremia, hypomagnesemia, hypocalcemia, and hypercalcemia can occur. Citrate metabolism can lead to metabolic alkalosis and hypocalcemia, requiring careful monitoring and adjustment of citrate infusion rates. Insufficient citrate metabolism in patients with reduced liver function and shock states resulting in accumulation with metabolic acidosis and hypocalcemia.

Heparin Anticoagulation:

Heparin binds to and activates antithrombin III (AT), thereby inactivates thrombin, factor Xa and other proteases. It is a well-established anticoagulant with a long history of use in various clinical settings. It is generally easier to manage since it does not require continuous calcium monitoring and adjustment. Heparin carries a higher risk of bleeding complications compared to RCA, especially in critically ill patients who are prone to bleeding. Although rare, heparin can cause Heparin-induced thrombocytopenia (HIT), an immune-mediated reaction leading to low platelet counts and potentially thrombotic complications. Heparin resistance can occur due to low antithrombin levels in the patient. Heparin is primarily metabolized in the liver, and its use may be limited in patients with severe liver dysfunction (table 1).

Another approach to use heparin is regional heparinization combining a prefilter dose of heparin, aiming at a prolongation of the extracorporeal aPTT, with postfilter neutralization with protamine, aiming at normalizing the systemic aPTT. But it is cumbersome and difficult to titrate because heparin has a much longer half-life than protamine, inducing a risk of rebound. In addition, it exposes the patient to the side-effects of both heparin (mainly the risk of HIT) and protamine (mainly anaphylaxis, platelet dysfunction, hypotension, and pulmonary vasoconstriction with right ventricular failure) and is therefore not recommended.

Characteristic	Citrate	Heparin
Mechanism of Action	Regional anticoagulation by chelating calcium ions, inhibiting clotting cascade in the extracorporeal circuit	Systemic anticoagulation by inhibiting thrombin and factor Xa, preventing blood clot formation
Anticoagulation Effect	Regional (in the extracorporeal circuit)	Systemic (throughout the body)
Impact on Platelets	Does not significantly affect platelet count or function	May decrease platelet count and have potential for heparin-induced thrombocytopenia (HIT)
Risk of Bleeding	Generally low	May increase the risk of bleeding, especially at higher doses or prolonged use
Monitoring Requirements	Requires monitoring of ionized calcium levels and adjusting citrate infusion rate to maintain the desired anticoagulation level	Requires monitoring of activated partial thromboplastin time (aPTT) or anti-Xa levels to adjust heparin dose for appropriate anticoagulation level
Reversal Options	Calcium infusion can be administered to reverse the anticoagulant effect of citrate, if necessary	Protamine sulfate can be used to reverse the anticoagulant effect of heparin, if necessary
Metabolism/Excretion	Metabolized in the liver, primarily excreted in the urine	Metabolized in the liver, excreted mainly in the urine and to a lesser extent in the feces
Considerations	Requires a separate citrate infusion to maintain regional anticoagulation in the extracorporeal circuit	Heparin has potential systemic effects and may be contraindicated in certain conditions (e.g., active bleeding, postoperative states, HIT)
Associated Risks	Risk of metabolic complications (e.g., metabolic alkalosis, hypocalcemia)	Risk of bleeding and heparin-induced thrombocytopenia (HIT)

Table 1. Comparison of citrate and heparin used in CKRT

RCA vs Heparin - Literature review:

Multiple randomized trials and meta-analyses have shown that RCA is better than heparin at preserving filter patency and has a lower risk of adverse events, including bleeding. In a crossover randomized trial, comparing anticoagulation with unfractionated heparin or citrate in 20 patients treated with postdilution CVVH, the citrate group had a longer filter lifetime and less spontaneous filter failure. Fewer patients in the citrate group required transfusion, and the number of transfused units was also lower.[3] Another study randomized 30 patients with AKI undergoing predilution continuous venovenous hemodiafiltration (CVVHDF) to anticoagulation with citrate or unfractionated heparin. The trial was stopped early because of an advantage using citrate, which resulted in a significantly improved filter survival (124.5 hours vs. 38.3 hours; P<0.001). In addition, significantly less citrate anticoagulated filters were terminated for clotting (16.7% vs. 53.5%). The incidence of bleeding also tended to be lower with citrate. Three patients in the citrate group had metabolic alkalosis and two had hypocalcemia.[4] Another trial randomized 48 patients with AKI treated with CVVH, to citrate or unfractionated heparin. Neither circuit survival nor the reasons for disconnecting the CVVH circuit differed significantly between the two groups. However, the number of major bleedings and the need for transfusion was significantly greater in the heparin group. Two cases of metabolic alkalosis were noted in the heparin group and two episodes of hypocalcemia in the citrate group.[5] A small randomized crossover study compared regional citrate anticoagulation to regional heparinization in 10 CVVH patients. Both treatment arms had a relatively short filter life (13 hours for regional heparinization and 17 hours for citrate) that did not differ significantly. No bleeding occurred in either group.[6] In a large randomized trial, 200 patients treated with postdilution CVVH were randomized to citrate or the low-molecular-weight heparin, nadroparin. Safety was significantly better in the citrate group with only two patients requiring a change in anticoagulation regimen vs. 20 patients in the nadroparin group. Circuit survival did not significantly differ. Rather surprisingly, the authors also found an improved renal recovery and an improved hospital survival in the citrate group.[7]

The largest meta-analysis (11 randomized trials, 992 patients) compared RCA with either systemic (nine trials) or regional (two trials) heparin. The risk of circuit loss was lower with RCA compared with regional heparin (hazard ratio [HR] 0.52, 95% CI 0.35-0.77) and systemic heparin (HR 0.76, 95% CI 0.59-0.98). The risk of bleeding was lower with RCA compared with systemic heparin (relative risk [RR] 0.36, 95% CI 0.21-0.60) and similar between RCA and regional heparin. There was no difference in survival between groups.[8] However, another recent meta-analysis that included different stud

ies reported no overall advantage for citrate in terms of circuit clotting but reported a reduction in major bleeding associated with RCA as compared with heparin (RR 0.22, 95% CI 0.08-0.62).[9] The above evidences led to the KDIGO recommending RCA as the anticoagulant modality of choice for CKRT in the absence of any contraindications. Despite these advances, heparin continues to be the predominant choice in most Indian hospitals, largely due to the perceived risk of metabolic complications and additional complexities with the use of citrate protocol.

Although several western studies have demonstrated the effectiveness of RCA, data from India is scarce. In the recently published first Indian study comparing the efficacy and safety of RCA versus heparin in CKRT, Senthilkumar et al found no significant difference in filter lifespan or risk of metabolic derangements. In this single center, prospective, open label, non randomized comparative study, adult patients admitted to ICU over one year period with renal insufficiency and requiring CVVHDF were included, with 25 patients each being allotted to the heparin and citrate groups. Primary outcome studied was the filter life span and secondary outcomes included metabolic derangements, bleeding episodes, and patient survival. The mean estimated filter lifespan (after censoring for non clotting related discontinuations) was 46.94 h for the citrate group and 40.05 h for the heparin group (p value = 0.29). Improvement in patient's metabolic parameters or hemodynamic status (64%) was the most common reason for stoppage of CKRT in the citrate group, while filter clotting (48%) was the most common reason for stoppage in the heparin group. No significant metabolic derangements or bleeding episodes were noted in either group. A trend toward higher patient survival rates in the citrate group was noted. Overall patient survival was higher in the citrate group at 52% versus 32% in the heparin group (p value = 0.15). A lower dose of citrate (2.0-2.5 mm/L) which was used in the study may be enough, especially in the Indian context and helps to bolster the safety profile of the RCA protocol.[10]

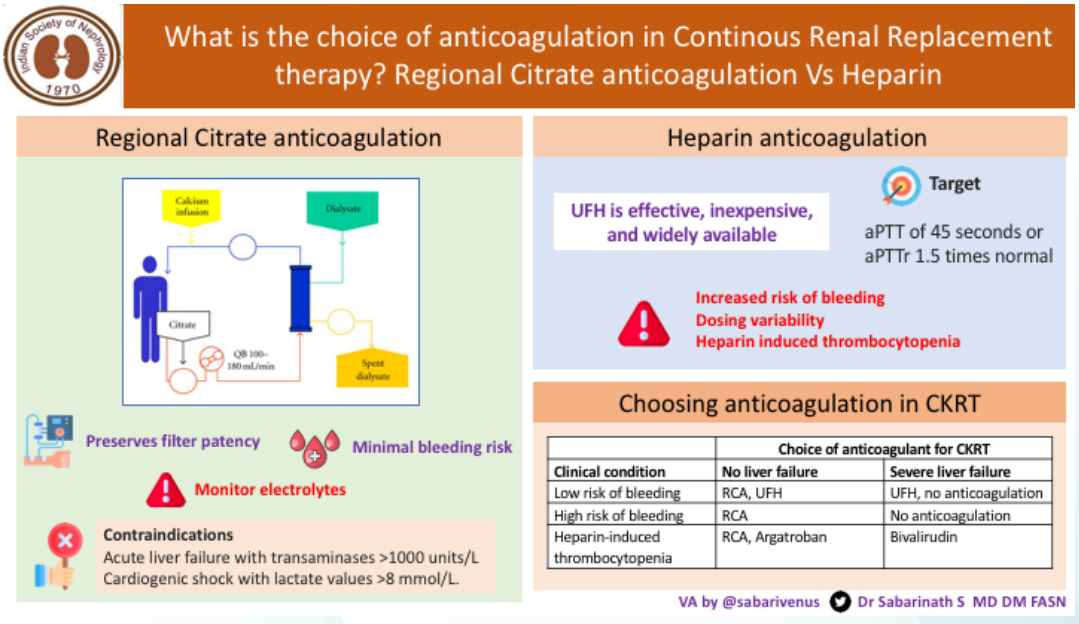
The choice between RCA and heparin anticoagulation in CKRT depends on various factors such as patient characteristics, comorbidities (coagulation status, bleeding risk, liver function), and institutional experience (table 2). The use of RCA in CKRT has several advantages. First, it provides effective anticoagulation, reducing the risk of circuit clotting. Second, it has a lower risk of bleeding complications compared to heparin, as it does not have systemic effects. Third, citrate has been shown to have potential benefits in modulating the inflammatory response and improving filter lifespan. However, RCA also has some considerations and challenges. One of the main concerns with citrate anticoagulation is the risk of metabolic complications, particularly in patients with liver dysfunction or impaired citrate metabolism. Citrate can lead to a decrease in ionized calcium levels, which can

result in hypocalcemia. Hypocalcemia can manifest as cardiac arrhythmias, muscle spasms, and neurologic symptoms. To mitigate this risk, citrate anticoagulation requires careful monitoring of ionized calcium levels and adjustment of citrate infusion rates. Both the anticoagulant options have their benefits and challenges, and the decision should be made on a case-by-case basis, considering the individual patient's needs and circumstances. RCA is particularly advantageous in patients with increased bleeding risk or liver dysfunction. However, it requires careful monitoring of electrolytes and acid-base status. Heparin remains a viable option, especially when there are concerns regarding citrate metabolism. It is important to involve a multidisciplinary team, including nephrologists, intensivists and critical care specialists, in determining the most appropriate anticoagulation strategy for CKRT.

	Choice of anticoagulant for CKRT	
Clinical condition	**No liver failure**	**Severe liver failure**
Low risk of bleeding	RCA, UFH	UFH, no anticoagulation
High risk of bleeding	RCA	No anticoagulation
Heparin - induced thrombocytopenia	RCA, Argatroban	Bivalirudin

Table 2. Selection of anticoagulant for CKRT

CKRT: continuous kidney replacement therapy, RCA: regional citrate anticoagulation, UFH: unfractionated heparin



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Past and Upcoming Events

Last Friday of every month, we are conducting monthly forum meets and we have discussed many interesting cases and their management. We have invited few of the eminent National and International faculty to give guest lectures in the past Forum meets. In association with Citizens Hospital, Hyderabad, Renal Transplant Symposium was conducted in March 2023. HNF conducted an educational program on Peritoneal Dialysis with the workshop and hands on training conducted at NIMS, followed by a CME program in April 2023. Again in the field of Kidney Transplantation, Transplant Conclave was conducted in association with AINU Hospital, Hyderabad, in May 2023. HNF also started a training program on Biostatistics for Nephrology students once in every 2 weeks at NIMS auditorium, from May 2023. Students are benefitting a lot with all these educational initiatives from HNF board. In June 2023, we had HNF monthly meet online and various interesting cases were discussed. In July 2023, we are having Immunology Workshop to discuss on various aspects of Immunological issues in the field of transplantation.

HYDERABAD NEPHROLOGY FORUM

Monthly Academic activity

28th April 2023

Program Details: **Afternoon session + Evening session**

Theme : Peritoneal Dialysis

Venue : **Nephrology Department, NIMS**

Workshop	Moderator
1. Percutaneous CAPD catheter insertion	Dr. Mukesh & Dr. Siddharth
2. PD Connectology + APD	Dr. Phani sree & Dr. Srinivas

Limited entries for hands on work shop:
Contact: Dr. Siddharth: 7204798166, siddhu.bmcri@gmail.com

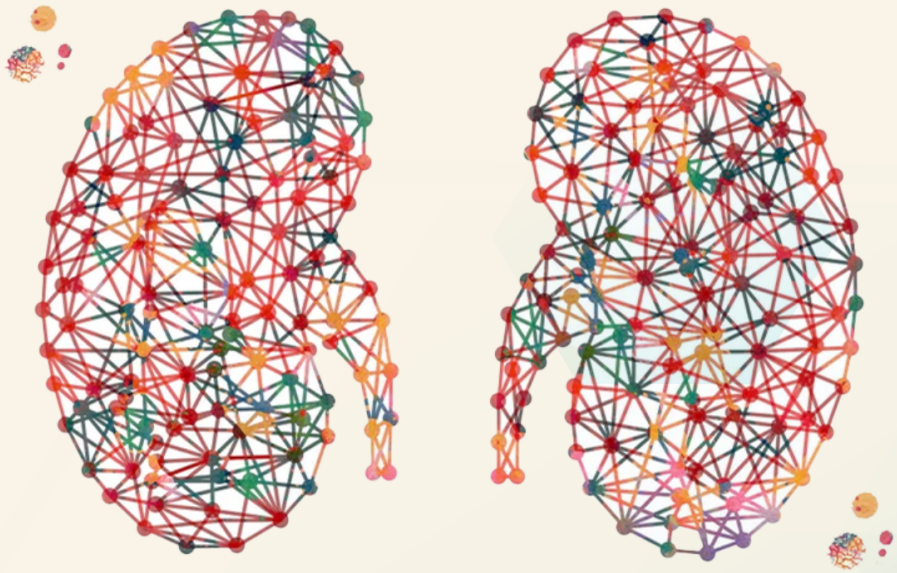
Evening session : **7 pm – 9 pm**
Venue : **Hyatt Place, Opposite to NIMS Hospital, Hyd.**

Time	Topic	Speaker	Chairperson
7:00pm-7:30pm	Recent Advances In Peritoneal Dialysis	Dr. Mayur Prabhu *Consultant Nephrologist, Prof & HOD KMC Mangalore.*	Dr. Girish Narayan Dr. K S Nayak Dr. Sree Bhushan Raju Dr. PS Vali
7:30pm-8:00pm	Peritonitis- How to Conquer?	Dr. Siddharth Herur *Assistant Professor NIMS, Hyderabad.*	Dr. Anuradha Raman Dr. Gangadhar Dr. Satti Reddy Dr. Srikanth
8:00pm-8:20pm	Interesting cases in PD - Case Discussion	Dr Chetan *Senior Resident, Nephrology OGH*	Dr. Pradeep Deshpande Dr. Manjusha Y Dr. Rajshekara Chakravarthy Dr. Kiranmai Ismal
8:20pm-8:40pm	Peritoneal Dialysis Services in HIV - our experience	Team Gandhi	Dr. T.K. Saha Dr. Vikranth Reddy Dr. Sridhar (Star) Dr. Rajakarthik

HYDERABAD NEPHROLOGY FORUM

AINU Asian Institute of Nephrology & Urology
Centre for Advanced kidney Care & Robotic Surgery

AINU Transplant *Conclave*



Date: May 13th & 14th

Hyatt Place, Banjara Hills, Hyderabad

HYDERABAD NEPHROLOGY FORUM

AINU Asian Institute of Nephrology & Urology
Centre for Advanced kidney Care & Robotic Surgery

AINU - Adhyayan

"Precision in Targeted Immunosuppression"

Day - 1	Program Schedule	Moderators
12:15-12:45 PM	Registration and Lunch	
12:45-01:00 PM	Welcome and Introduction - ***Dr MV Rao***	
Session - 1	**The Basics**	**Dr Anuradha**
01:00-01:25 PM	Immune Mechanisms on play in Renal Transplantation ***- Dr Navinath M***	**Dr Manisha Sahay**
01:30-01:55 PM	Pros, cons and the choice of Induction ***- Dr Rajha Ramachandran***	**Dr Tarun Kumar Saha**
02:00-02:25 PM	Triple immunosuppression- Dosing, timing, interactions and what all you're doing wrong - ***Dr Srikanth Gundlapalli***	**Dr Pradeep Deshpande**
02:30-02:55 PM	Beyond the standard triple drug regimen- Who and why? ***- Dr Santosh Varughese***	
03:00-03:25 PM	Managing the side effects of immunosuppression ***- Dr PS Vali***	
03:30-03:55 PM	The Future of Immunosuppression - ***Dr Vivekanand Jha***	
04:00-04:15 PM	**Tea Break**	
Session 2	**Immunosuppression in Infections and malignancy**	**Dr Girish Narayan**
04:15-04:40 PM	Adjusting immunosuppression during and after infections- Holding your cool ***- Dr Manjusha Yadla***	**Dr Rajendra Prasad**
04:45-05:10 PM	The tragic trio- CMV, tuberculosis and fungal infections- the harmony with immunosuppressive medications ***- Dr Rajasekhar Chakravarthi***	**Dr Varun**
05:15-05:40 PM	Transplant malignancies- Ensuring graft survival with drug optimization ***- Dr B Ravi Shankar***	
05:45-06:00 PM	Wrap-up and Q&A Session	

Day - 2	Program Schedule	Moderators
Session - 1	**Immunosuppression in Rejection**	**Dr Gangadhar**
09:30-09:55 AM	Acute cellular rejection- Winning the battle effectively ***- Dr Sampath Kumar***	**Dr Kiranmayee I**
10:00-10:25 AM	ABMR- Rejection to recovery - ***Dr Sreebhushan Raju***	**Dr M V Rao**
10:30-10:55 AM	Modifying maintenance Immunosuppression and Prophylaxis after rejection - ***Dr Edwin Fernando M***	
10:30-10:55 AM	**Tea Break**	
11:00-11:30 AM	Immunosuppression for minimizing chronic rejection- The holy grail - ***Dr Urmila Anandh***	
Session 2	**Desensitisation**	**Dr Kamal Kiran**
11:30-11:55 AM	ABO incompatible transplant- Breaking the divine barrier ***- Dr Deepak Ray***	**Dr Sairam Reddy**
12:00-12:25 PM	Managing a sensitized patient on deceased donor list- Feasibility and options ***- Dr Anil Kumar BT***	**Dr Sridhar Gandhe**
12:30-12:55 PM	Ask the expert	
01:00-01:15 PM	Closing remarks and Vote of thanks ***- Dr Srikanth Bathini, Dr Sujeeth bande***	

HYDERABAD NEPHROLOGY FORUM

Monthly Academic activity -Webinar

30th June 2022 7:00 PM

Mistress of Ceremony:

Dr. Anita
(Assistant Prof, Nephrology AIIMS, Hyderabad)

Welcome Address:

Dr. G Swarnalatha
(Prof & Unit Head,
Nephrology NIMS, Hyderabad)

Time	Topic	Speaker	Chairperson
7:00pm-7:30pm	Recurrence Post transplant	Dr. Pallavi **Senior Resident,** Nephrology NIMS	Dr. K V Daskhinamurty Dr. Sree Bhushan Raju Dr. Nageshwar Reddy
7:30pm-8:00pm	RPGN -What's unusual	Dr. Vinod Babu Murakonda **Consultant Nephrologist,** KHIMS Hospital, Khammam	Dr. Girish Narayan Dr. Manisha Sahay Dr. Ventaka Ramana
8:00pm-8:30pm	Series of Nephrotic syndrome in Infancy	Dr. Lohita **Senior Resident,** Nephrology OGH	Dr. Anuradha Raman Dr Rajashekar Chakravarthy Dr. Manjuha Yadla
8:30pm-8:40pm	Q & A Session		
8:40pm-8:50pm	Conclusions remarks -	Dr. P S Vali	
8:50pm-9:00pm	Vote of thanks -	Dr. Vikram Kumar	

HYDERABAD NEPHROLOGY FORUM

Nephrology Residents! Here is the opportunity to learn

FUNDAMENTALS OF BIOSTATISTICS USING R

&

A PRIMER ON BASIC VISUAL PRESENTATION SKILLS

Venue:

Seminar Room, Dept of Nephrology, NIMS

Timings

18th May 2023, Thursday, 5 pm to 7 pm
Sessions would be Alternate Weeks

Eligibility

Interest to learn and basic knowledge of using a computer!
Any prior knowledge of using databases/ R will be a bonus

Faculty:

Dr Seera Pani Gopaluni, MRCP, PhD Consultant Nephrologist, Citizen's Hospital
Dr Sri Kala, PhD, Statistician
Dr P S Vali, Consultant nephrologist, AINU

Dr. G. Swarnalatha
General Secretary - HNF
Professor & HOD,
Dept of Nephrology, NIMS

Dr. Manisha Sahay
President - HNF
Professor & HOD,
Dept of Nephrology OGH

COURSE CONTENT

Session (90 minutes)	Topic	Outline
1	Introduction to R	Downloading R Studio and familiarising with R environment.
2	Introduction to the subject Statistics, Types of research studies, and Scales of Measurement	Importance, Definition, applicability and scope of the subject Statistics **Types of Research Studies** Cross-sectional, Longitudinal. Primary data & Secondary data Qualitative data & Quantitative data Scales of Measurement - Nominal, Ordinal, Interval & Ratio Scales. Likert scale of measurement
3	Descriptive Statistics 1	**Measures of Central Tendency** (Definitions, formulae and computing the measures using R) Arithmetic Mean, Median, Mode, Geometric Mean, Harmonic Mean **Quantiles** - Quartiles, Quintiles, Deciles, Percentiles and applications
4	Descriptive Statistics 2	**Measures of Dispersion** (Definitions, formulae and computing the measures using R) Range, Quartile Deviation, Mean Deviation, Standard Deviation, Variance, Coefficient of Variation, Skewness and Kurtosis.
5	Data Visualization	Purpose of Data Visualization. **Diagrammatic Representation -** Line, Bar and Pie charts. **Graphical Representation -** Histogram, Ogives, Box plot and Stem - Leaf plot. (Description and construction using R)
6	Linear Regression Analysis	Bivariate data, scatter diagram, simple, partial and multiple correlation (3 variables only), rank correlation. Simple linear regression. (Definitions, concepts, formulae and analysis using R).
7	Inferential Statistics 1	**Basic techniques of sampling -** Purposive Sampling, Simple random Sampling and Stratified Random Sampling. Normal Distribution & Central Limit Theorem (CLT). **Basic Concepts of Statistical Hypothesis Testing** Statistical Hypothesis, Null and Alternative Hypothesis, Types of Errors, Level of Significance, Critical and Acceptance Regions, Critical values, P- Value.
8	Inferential Statistics 2 Parametric Tests	t test for testing single mean, difference of 2 means and Paired t-test F test for testing difference between 2 variances (Testing Procedures and peforming the tests using R)
9	Inferential Statistics 3	X2 test for Independence of Attributes and Goodness of Fit (Testing Procedures and peforming the tests using R)
10	Inferential Statistics 4 Non Parametric (NP) Tests	Advantages of NP tests over Parametric Tests, NP tests - Wilcoxon Mann WhitneyU Test, Wilcoxon Signed Rank Test and Kruskal Wallis Test (Testing Procedures and peforming the tests using R)
11	A Primer on Basic Visual Presentation Skills - 1	Basics of Visual Elements of a Powerpoint Slide Design - Dos and Donts
12	A Primer on Basic Visual Presentation Skills - 2	A Tour to Tools of Powerpoint Software - A Treasure Hunt
13	A Primer on Basic Visual Presentation Skills - 3	How to make a Visual Abstract - Part 1
14	A Primer on Basic Visual Presentation Skills - 4	How to make a Visual Abstract - Part 2

HYDERABAD NEPHROLOGY FORUM

WOMEN IN NEPHROLOGY INDIA

Hyderabad Nephrology Forum Monthly Activity on

IMMUNOLOGY WORKSHOP

Venue:

Venue Auditorium 5th floor, Trauma block,
NIMS Hospital

Timings

16th July 2023
9:00 am to 5:00 pm

CLICK BELOW

REGISTER NOW

PROGRAMME SCHEDULE

S.NO	TIME	SESSION	SPEAKER	CHAIRS
1	09:00 AM - 09:30 AM	Basics of Transplant Immunology	**Dr. Seerapani Gopaluni** Consultant Nephrologist, Citizens Hospital, Hyderabad	Dr. Anuradha Raman Dr. Manjusha Yadla Dr. Kiranmai
2	09:30 AM - 10:00 AM	HLA Typing - Will increasing resolution resolve problems?	**Dr. Neeraja** Consultant Transplant Immunology, Apollo Hospitals, Hyderabad	Dr. Girish Narayan Dr. Gangadhar Taduri Dr. Vijaykumar
3	10:00 AM - 10:30 AM	CDC Crossmatch - Old is Gold	**Dr. Rajeshwari Basavanna** Consultant - Transfusion Medicine PD Hinduja Hospital, Mumbai	Dr. KV Dakshinamurthy Dr. D. Sreebhushan Raju Dr. G. Jyothsna
TEA BREAK (15 min)				
4	10:45 AM - 11:15 AM	Flow Crossmatch - Is Flow alone enough?	**Dr. Anil Handoo** Director, Laboratory Services BLK-MAX Super Speciality Hospital New Delhi	Dr. Pradeep Deshpande Dr. Rajashekhar Chakravarthy Dr. Srikanth

PROGRAMME SCHEDULE

S.NO	TIME	SESSION	SPEAKER	CHAIRS
5	11:15 AM - 11:45 AM	Solid Phase Assays and their Clinical use	**Dr. Shruti Tapiawala** Consultant Nephrologist Global Hospitals, Mumbai	Dr. Krishnan Dr. Ramesh Chada Dr. Dhanalakshmi
6	11:45 AM - 12:15 PM	Epitope Matching - Match made in heaven?	**Dr. Feroz Aziz** Consultant Nephrologist Aster MIMS, Calicut	Dr Kamal Kiran Dr. Urmila Anandh Dr. Sridhar G
7	12:15PM - 12:45 PM	Setting up of a Transplant Immunology lab	**Dr. Ankit Mathur,** Additional Medical Director, Rotary TTK Blood Center, BMST, Bengaluru	Dr. Krishna Mohan Dr.Shashikiran Dr. Karthik
8	12:45 PM - 01:15 PM	Conclusion - Interpretation of all Immunological tests	**Dr. Rajeshwari Basavanna** Consultant - Transfusion Medicine PD Hinduja Hospital, Mumbai	Dr. Tarun Kumar Saha Dr. Ratan Jha Dr MV Rao

PROGRAMME SCHEDULE

S.NO	TIME	SESSION	SPEAKER	CHAIRS
LUNCH BREAK (30 min)				
9	01:45 PM- 02:15 PM	The evolving role of Hematopoetic stem cells as Immune tolerance strategy for live donor renal transplant.	**Dr. Ganesh** Lead Consultant and Head, Dept of Hematology & BMT, Yashoda Hospital, Somajiguda	Dr. Sadasivudu Dr. Praveen Etta Dr. Shyam Sunder
CASE DISCUSSIONS				
10	02:15 PM - 02:45 PM	Case Discussion 1	NIMS Team	**Panelists** Dr. Swarnalatha. G Dr. Urmila Anandh Dr. Manjusha Yadla Dr. Rajeshwari B Dr. Anil Handoo Dr. Shruti Tapiawala Dr. Feroz Aziz Dr. Ankit Mathur Dr. Anuradha K
11	02:45 PM - 03:15 PM	Case Discussion 2	NIMS Team	
12	03:15 PM - 04:00 PM	Case Discussion 3	Osmania Team	

The Role of Registries in Kidney Transplantation Across International Boundaries

Transplant professionals strive to improve domestic kidney transplantation rates safely, cost efficiently, and ethically, but to increase rates further may wish to allow their recipients and donors to traverse international boundaries. Travel for transplantation presents significant challenges to the practice of transplantation medicine and donor medicine, but can be enhanced if sustainable international registries develop to include low- and low-middle income countries. Robust data collection and sharing across registries, linking pretransplant information to post-transplant information, linking donor to recipient information, increasing living donor transplant activity through paired exchange, and ongoing reporting of results to permit flexibility and adaptability to changing clinical environments, will all serve to enhance kidney transplantation across international boundaries.

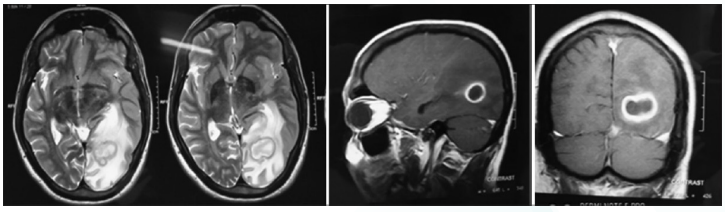
Prasad GVR, Sahay M, Kit-Chung Ng J. The Role of Registries in Kidney Transplantation Across International Boundaries. Semin Nephrol. 2022 Jul;42(4):151267

Disseminated Medicopsis Romeroi Infection in a Kidney Transplant Recipient Medicopsis romeroi is a rare, dematiaceous fungus that is difficult to identify using conventional fungal tests. Although uncommon, immunocompromised patients are particularly susceptible to this opportunistic fungus. Here, authors reported the case of a renal transplant recipient who presented with painful disseminated subcutaneous and soft tissue lesions. Sequencing of the Internal transcribed spacer (ITS) region of the ribosomal DNA identified the fungus as Medicopsis romeroi. Additionally, tissue samples from a non-healing wound on the left forearm grew Rhizopus spp. on Sabouraud dextrose agar, indicating a Mucormycosis superinfection. The patient's condition improved with surgical intervention and antifungal therapy with Posaconazole and Terbinafine. Phaeohyphomycosis, especially due to Medicopsis romeroi, is rare in presentation. However, considering the increasing number of reported Medicopsis infections, it is reasonable to consider the possibility of this rare fungal infection in renal transplant recipients who present with cutaneous, subcutaneous, or soft tissue lesions while on immunosuppressive therapy. History of traumatic inoculation as well as travel to tropical and subtropical regions must be noted. This case demonstrates the need for a high index of suspicion in order to facilitate early diagnosis and treatment and thus reduce the risk of dissemination.

Bhavana Ganduri, R. Sujith, Praveen Tirlangi, et al. Disseminated Medicopsis Romeroi Infection in a Kidney Transplant Recipient. Journal of Medical Mycology, 2022.

Brain Abscess with Unusual Organism Staphylococcus hemolyticus in a Renal Transplant Recipient -A Case Report

The immunosuppressive medications in renal transplant recipients are associated with increased risk of infections, leading to significant morbidity and mortality. Here, authors reported a case of focal brain abscess, 8 months after deceased donor renal transplantation in a patient with headache and altered mentation. Patient had a history of fungal pneumonia 3 months before presenting illness and received intravenous liposomal amphotericin B, for 6 weeks. On evaluation, he was found to have brain abscess, with mild graft dysfunction. Computerized tomography-guided stereotactic aspiration of the brain abscess was done which grew Staphylococcus hemolyticus. Intravenous catheter placed for 6 weeks for antifungal therapy for the management of previous fungal pneumonia was thought to be cause of staphylococcal infection. He was managed with intravenous clindamycin and levofloxacin for 6 weeks as per antibiogram and immunosuppressive medications were reduced. After 6 months of follow-up, patient was asymptomatic with normal renal function and minimal immunosuppressive medications.



Although uncommon, immunocompromised patients are particularly susceptible to this opportunistic fungus.

Jonnalagadda N, Guditi S, Das U, Kalidindi RK, Vijayan S, Patel RK, et al. Brain abscess with unusual organism Staphylococcus haemolyticus in a renal transplant recipient -A case report. Indian J Transplant 2022;16:431-4.

Allograft Rejection in Kidney Transplantation – A Retrospective Study of Impact on Graft and Patient Outcome

Renal allograft rejection is a major cause of graft dysfunction, and it is a predictor of long-term allograft loss. Advances in immunosuppression have decreased the influence of acute rejection on graft survival. In this study, authors assessed clinicopathological profile and immediate and long-term treatment outcomes of different types of allograft rejections. They retrospectively analyzed patients who underwent renal transplantation and had biopsy-proven renal allograft rejections from January 2010 to December 2019. Recipient–donor characteristics at the time of transplantation and graft function post transplantation were documented. Patients were followed up till graft loss or patient loss or a minimum 12-month period after rejection episode for all survived patients. Allograft rejection occurred in 88/424 (20.75%) renal transplant recipients during the study period. Active antibody-mediated rejection (ABMR) was the most common type of rejection (40.9%) and was common in early posttransplant period also (54.5%). Graft dysfunction was the dominant presentation in all groups except chronic active ABMR, where heavy proteinuria was common. Chronic active ABMR was common (37.5%) in second episode of rejection. Overall graft survival, death-censored graft survival, and patient survival at the end of the study were 52.27%, 82.95%, and 69.3%, respectively.

To conclude, renal allograft rejection decreases both graft and patient survival. Hence authors recommended regular surveillance for early detection and treatment.

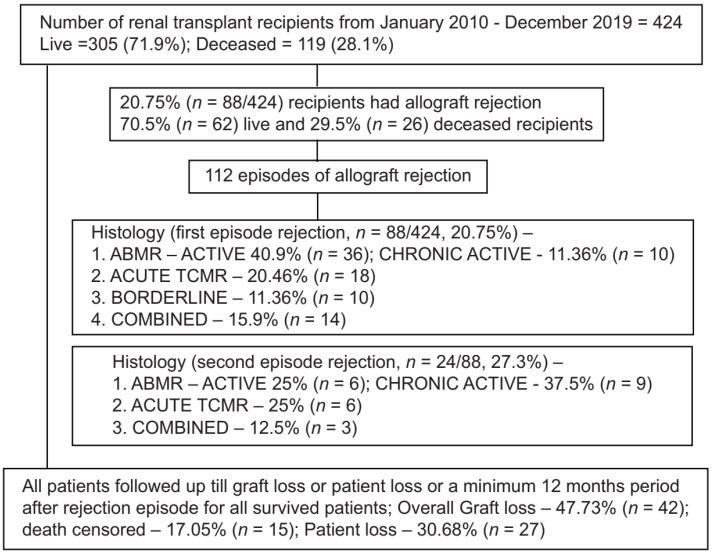


Figure 1: Flow diagram of the study

Shamsudheen MP, Kuchay A, Gupta VC, Tiwari I, Karthik R, Das U, Guditi S, et al. Allograft rejection in kidney transplantation – A retrospective study of impact on graft and patient outcome. Indian J Transplant 2022;16:371-6.

Epidemiology and Outcomes of Glomerular Diseases in Low- and Middle-Income Countries

Glomerular diseases account for a significant proportion of chronic kidney disease in low-income and middle-income countries (LMICs). The epidemiology of glomerulonephritis is characterized inadequately in LMICs, largely owing to unavailable nephropathology services or uncertainty of the safety of the kidney biopsy procedure. In contrast to high-income countries where IgA nephropathy is the dominant primary glomerular disease, focal segmental glomerulosclerosis is common in large populations across Latin America, Africa, Middle East, and South East Asia, while IgA nephropathy is common in Chinese populations.Despite having a high prevalence of known genetic and viral risk factors that trigger focal segmental glomerulosclerosis, membranoproliferative glomerulonephritis also is common in adults and children in some African countries. Treatment of glomerular diseases in adults and children in LMICs largely is dependent on corticosteroids in combination with other immunosuppressive therapy, which often is cyclophosphamide because of its ready availability and low cost of treatment, despite significant adverse effects. Partial and/or complete remission status reported from studies of glomerular disease subtypes vary across LMIC regions, with high rates of kidney failure, mortality, and disease, and treatment complications often reported.

Improving the availability of nephropathology services and ensuring availability of specific therapies are key measures to improving glomerular disease outcomes in LMICs.

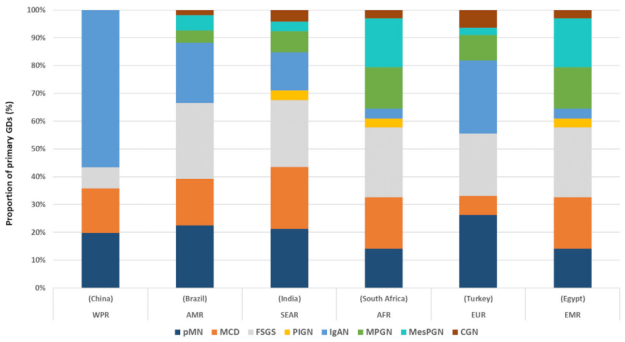


Figure 2. Distribution of primary glomerular diseases by studies in World Health Organization low- and middle-income countries. Abbreviations: AFR, Africa region; AMR, Americas region; CGN, crescentic glomerulonephritis; EMR, Eastern Mediterranean region; EUR, European region; FSGS, focal segmental glomerulosclerosis; GD, glomerular disease; IgAN, IgA nephropathy; MCD, minimal change disease; MesPGN, non-IgA mesangial proliferative glomerulonephritis; MPGN, membranoproliferative glomerulonephritis; PIGN, postinfectious glomerulonephritis; pMN, primary membranous nephropathy; SEAR, South East Asia region; WPR, Western Pacific region. Data are from Imtiaz et al,[40] Okpechi et al,[42] Polito et al,[44] Barsoum and Francis,[47] Mittal et al,[50] and Turkmen et al.[60]

Ekrikpo U, Obiagwu P, Chika-Onu U, Yadla M, Karam S, Tannor EK, Bello AK, Okpechi IG. Epidemiology and Outcomes of Glomerular Diseases in Low- and Middle-Income Countries. Semin Nephrol. 2023 Feb 9;42(5):151316. doi: 10.1016/j.semnephrol.2023.

COVID-19 could be a novel risk factor for avascular necrosis after kidney transplantation

Coronavirus disease 2019 (COVID-19) can lead to systemic immune dysregulation and hypercoagulable state with resultant macro- and microvascular thrombosis. Various immunomodulatory therapies have been evaluated in treating it with variable success. Corticosteroids are considered the first choice drugs in hospitalized patients with severe COVID-19 who are on ventilator or receive supplemental oxygen as they are shown to have a mortality benefit. Both the virus pathogen itself and the therapies used to treat can trigger avascular necrosis (AVN) of bones. Recently, authors have encountered a case of AVN affecting bilateral hips in a kidney transplant recipient (KTR) following recovery from COVID-19. To the best of their knowledge, this is the first report of COVID-19-associated AVN in a KTR.

Table 1: Putative risk factors and causes of posttransplant avascular necrosis

Uremia
Longer duration of CKD and dialysis
Mineral bone disease
Hyperparathyroidism
Osteopenia and osteoporosis
Severe iron overload
Thromboembolism
Acute rejection episodes
Overweight and obesity (including posttransplantation weight gain)
Infections: Osteomyelitis, angioinvasive pathogens, sepsis, and COVID-19¶
Autoimmune: SLE
Drugs: Corticosteroids, cyclosporine, and antiresorptive agents (bisphosphonates and denosumab)
Neoplasms: Paraproteinemia, leukemia, and neoplastic vascular infiltration
Addictions: Excessive alcohol intake and cigarette smoking
Genetic: Sickle cell disease, Gaucher disease, and inherited thrombophilia
Direct injury: Fracture or dislocation, radiation injury, decompression sickness, and barotrauma
Others - HSCT and graft-versus-host disease
Idiopathic

¶COVID-19 could be a novel risk factor. CKD: Chronic kidney disease, COVID-19: Coronavirus disease 2019, SLE: Systemic lupus erythematosus, HSCT: Hematopoietic stem cell transplant

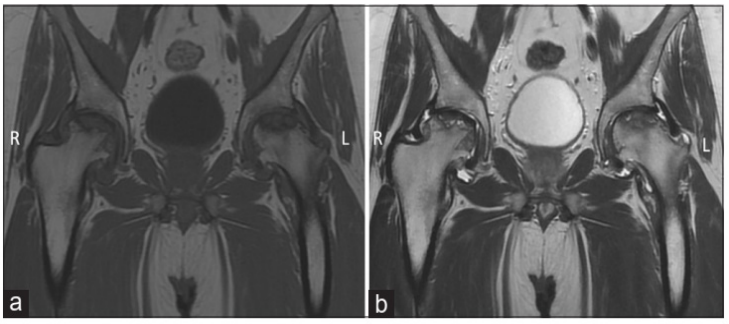


Figure 1: Coronal images of MRI scan of the bilateral hip joints showing geographical heterogeneous low signal intensity areas replacing normal marrow signal in the femoral heads suggestive of avascular necrosis (a, T1-weighted; b, T2-weighted). MRI: Magnetic resonance imaging

Etta PK, Madhavi T, Panjwani RS. Coronavirus disease 2019 could be a novel risk factor for avascular necrosis after kidney transplantation. Indian J Transplant 2022;16:350-1.

Are renal microvascular lesions the novel histological predictors in IgA nephropathy

IgA nephropathy (IgAN) is the most common cause of primary glomerulonephritis with a variable clinical course, and shows diverse pathological findings ranging from minimal glomerular lesions, segmental glomerulosclerosis (S), mesangial (M) and endocapillary (E) hypercellularity, diffuse proliferative and crescentic (C) glomerulonephritis and advanced glomerulosclerosis with marked tubular atrophy/interstitial fibrosis (T). Lee et al. (1982), Haas (1997), Manno et al. (2007), and the Oxford classification (2009; updated in 2016) have evaluated and classified several glomerular and tubulointerstitial lesions with prognostic significance. The Oxford classification initially identified four histologic variables (MEST), which were shown to be independently associated with renal outcome in biopsy specimens with a minimum of eight glomeruli. Later, the presence of crescents was found to be an independent risk factor for the combined renal outcome in larger studies. This has prompted the inclusion of cellular or fibrocellular crescents (C) score in addition to the four components of the original MEST score i.e., MEST-C score in updated Oxford classification. Microvascular lesions in IgAN are diverse and often accompany the presence of hypertension. TMA has been variably described in association with IgAN (as high as 53% of biopsies).

TMA in IgAN may not always be associated with malignant hypertension and portends a poor renal outcome. Other vascular lesions such as fibrinoid necrosis is seen in ~ 10% of IgAN biopsies and these necrotizing lesions seem to be responsive to immunosuppression. It remains poorly understood whether microvascular lesions play an important role in the progression of IgAN. Preliminary data from West supports the hypothesis that microvascular lesions may correlate with hypertension, greater proteinuria and renal dysfunction and overall poorer renal outcomes and serve as important histological prognostic indicators in IgAN. Further long-term prospective multicenter studies will be necessary to assess the significance of microvascular lesions on the renal outcome. In future, these lesions could be considered for inclusion in formal scoring systems of IgAN. This may further improve our current understanding of this diverse disease and help in clinical decision-making.

Table 1: Current MEST-C scoring of IgAN (updated Oxford classification)

Histological finding	*Definition*	*Scoring*
Mesangial hypercellularity (M)	More than four mesangial cells in any mesangial area of a glomerulus	M0: if mean mesangial hypercellularity score is <0.5 M1: if mean mesangial hypercellularity score is >0.5
Endocapillary hypercellularity (E)	Increased number of cells within glomerular capillary lumina	E0: absent E1: present in any glomerulus
Segmental glomerulosclerosis (S)	Adhesion or sclerosis (obliteration of capillary lumina by matrix) in part but not the whole glomerular tuft	S0: absent S1: present in any glomerulus
Tubular atrophy/ interstitial fibrosis (T)	Estimated percentage of cortical area showing tubular atrophy or interstitial fibrosis, whichever is greater	T0: 0-25% of cortical area T1: 26-50% of cortical area T2: >50% of cortical area
Crescents (C)	Percentage of glomeruli with cellular or fibrocellular (not fibrous) crescents	C0: absent C1: 0-25% of glomeruli C2: >25% of glomeruli

Table 2: Microvascular lesions in IgA nephropathy

Hypertensive vasculopathy
Thrombotic microangiopathy
Arterial medial thickening
Arterial myointimal hyperplasia
Arterial intimal fibrosis
Arteriosclerosis
Fibrinoid necrosis of arterioles
Arteriolar hyalinosis
Arteriolosclerosis
Arteriolar intimal thickening
Intimal hyperplasia
Onion-skin appearance of intima
Subintimal fibrosis
Subintimal hyalinosis
Mucoid intimal hyperplasia
Proliferative arteriolopathy
Duplication of internal elastic lamina
Wrinkling of internal elastic lamina
Arteriolar thrombosis
Arteriolar inflammatory cell infiltration
Arteriolar endotheliocyte swelling
Endothelialitis
Subendothelial widening

Etta PK, Madhavi T. Are renal microvascular lesions the novel histological predictors in IgA nephropathy. Indian J Pathol Microbiol 2023;66:216-8.

COVID-19-associated acute cortical necrosis

Coronavirus disease 2019 (COVID-19) has been associated with acute kidney injury (AKI) in about 30-40% of hospitalized patients. It can result in systemic inflammation, cytokine storm, microcirculatory dysfunction, and hypercoagulable state with resultant arterial and venous thrombosis. Thrombotic microangiopathy (TMA) can rarely result from COVID-19 infection and can precipitate acute cortical necrosis (ACN). Authors described a case of COVID-19 associated AKI due to ACN without evidence of TMA.

Patient was detected to have ACN without evidence of TMA or large vessel thrombosis. It could probably be triggered by COVID-19 associated microcirculatory dysfunction, cytokine storm, and microvascular thrombosis. They could not evaluate for antiphospholipid antibodies (aPLs). There were no other predisposing factors for ACN. Due to the patchy nature of ACN in the patient, the renal function has recovered partially which was enough to stop dialysis. This case illustrates that ACN can result rarely due to systemic effects of COVID-19 infection and it may not always be associated with TMA. It remains to be evaluated whether aPLs are involved in the pathogenesis of the ACN in COVID-19. The cause of ACN, in this case, remains undetermined, however, the history of recent COVID-19 infection may indicate an indirect effect of COVID-19 in its pathogenesis. Multiple pathogenic events related to COVID-19 can be implicated.

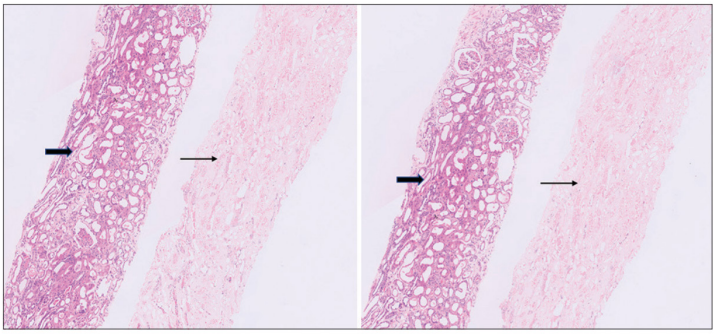


Figure 1: Light microscopy examination of the kidney biopsy specimens showing areas of acute tubular injury with vacuolization, flattening, and denudation of lining epithelium (thick arrows) and patchy cortical necrosis with ghost outlines of necrotic tubules (thin arrows) (hematoxylin and eosin stain, ×5)

Etta PK, Madhavi T. COVID-19-associated acute cortical necrosis. Indian J Pathol Microbiol 2023;66:229-30.

Achievements

Our HNF senior consultants and faculty members have participated the World Congress of Nephrology held at Bangkok, Thailand in April 2023. Several of them have been elected as the governing body members of International Society of Nephrology.

Dr Swarnalatha Guditi, Dr Manjusha Yadla, and **Dr Manisha Sahay** are elected as members of regional board, ISN

Dr Manisha Sahay - Deputy chair, ISN CME committee

Dr Manjusha Yadla - Deputy chair, ISN SoMe committee

Dr Manisha Sahay - Executive Member, ISN

Dr Sree Bhushan Raju, Professor in Nephrology at NIMS got selected as Honorary Secretary for Southern Chapter of Indian Society of Nephrology

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Dr Swarnalatha Guditi, Professor of Nephrology got promoted as Head, Department of Nephrology at NIMS

Hyderabad Nephrology Forum - Research Grant

I. Objective of the Research grant

Hyderabad Nephrology Forum is a consortium of Nephrologists based at Hyderabad and Telangana for over 25 years now and has been actively engaged in conducting regular academic sessions. With the aim of encouraging research and innovation in the field of nephrology, Hyderabad Nephrology Forum introduces a research grant for enthusiastic academicians and researchers.

II. Research Committee

With this aim, a research committee has been formed under the aegis of Hyderabad Nephrology Forum.

A. Composition of the research committee

1. Selection of members of research committee would be through Governing Body meeting
2. Nephrologists with experience in research and publication would be the members
3. One member representation from other than Telangana state
4. The treasurer would also be the member of the committee
5. The general secretary would convene the research committee meeting as when required

B. Term of the research committee members

1. The term of each member would be for 2 term i.e. 4 years
2. The treasurer of that term would be member of the committee
3. The General Secretary would be for that term

C. Scope of the research committee

1. Form / Amend guidelines for the giving research grants to the research projects
2. Call for the applications for research grants annually
3. Scrutiny of all the application and finally select the research project based the guidelines and merit for the research grant
4. The committee shall coordinate with the President, Secretary and the Treasurer for the release of amount in the phased manner
5. Review and audit of the completed research project and submission of a report to the Governing body.
6. The Research Committee shall scrutiny all the applications and select one research project annually and constantly monitor and support the research project.

Hyderabad Nephrology Forum - Research Grant

III. Who can apply

1. All the postgraduates pursuing DM or DrNB in Nephrology in Hyderabad and Telangana region are eligible to apply.
2. Early career Nephrologists (< 5 yrs) working in teaching hospitals in of Hyderabad and Telangana region are eligible to apply

IV. Criteria For Applying

1. Innovative, cutting edge research proposals in Basic sciences, Clinical and Epidemiological arena pertaining to field of
   a. Renal physiology
   b. Clinical Nephrology
   c. Glomerular diseases
   d. Hemodialysis and peritoneal dialysis
   e. Transplantation
2. Applicants should be members of Hyderabad Nephrology forum.
3. The research proposal should be guided by a senior faculty in Nephrology where the applicant is currently studying/employed with experience in research and publications,
4. A detailed research proposal plan with the objectives, methodology, expected results and time-lines to be achieved including the budget proposal shall be submitted.
5. The proposal should have an institutional ethics committee clearance.

V. About the grant

1. The research grant shall include a sum of not more than Rs.1,00,000/- per research project
2. The research grant shall cover expenditure incurred towards basic investigations, procuring reagents/consumables for special investigations, standard of care medications, and basic equipment.
3. It shall not cover expenses incurred towards travelling, man power, infrastructure and high equipment.

4. The grant shall be released by treasurer and General secretary in a phased manner after initial approval by the research committee:

a. Half of the grant shall be released after submission of the appropriate bills through the guide

b. 2nd half of the grant shall released after completion of the project and submission of the final manuscript

5. The decision taken by the research committee shall be final.

VI. After receiving the grant

1. The title and the research proposal may not be changed after receiving the grant.
2. The research committee shall be updated regarding the progress of the project every 6 months.
3. The research project should be completed within 3 years of submission
4. The research project shall be published in a reputed journal within a year of completion
5. Hyderabad Nephrology Forum shall be duly acknowledged as the source of external funding.
6. In the event of applicant not adhering to the guidelines, the research grant shall be withdrawn
7. The decision taken by the research committee shall be final

HNF Research Grant Application Form

Application for the year .....

I. Details of the applicant

1. Name –
2. Age/Sex –
3. Current Designation –
4. Current Affiliation –
5. Years of experience –
6. Previous research grants received –
7. Mobile no –
8. Email id –
9. HNF Membership No –
10. Any other disclosure –

II. Details of the research Guide

1. Name of the Research Guide –
2. Current Designation-
3. Current/ Affiliation –
4. Years of experience –
5. Number of Research Projects done-
6. Number of Publications-
7. Mobile no-
8. Email id-
9. HNF Membership No
10. Any other disclosure

Application for the year .....

III. Details of Research project

1. Title of Research Project –
2. Objectives –
3. Methodology –
4. Statistics –
5. Performa of data collection –
6. Consent form –
7. Expected results –
8. Review of Literature –
9. IEC Approval –
10. Details of the expenses involved –
11. Upload pdf –
    a. Project details –
    b. Funding details –

The last date for submission of research project to avail the research grant is 30th Aug 2023.

Please send an email with all the above details to the Secretary HNF.
E-mail: hyderabadnephrologyforum@gmail.com

For information please contact –
Prof and HOD, Dept of Nephrology at NIMS, Dr Swarnalatha Guditi @ 9908662448.

2024 HYDERABAD ISNSCCON

8th 9th 10th & 11th FEBRUARY

HYDERABAD NEPHROLOGY FORUM

43rd ANNUAL CONFERENCE

INDIAN SOCIETY OF NEPHROLOGY SOUTHERN CHAPTER &

6th CHAPTER TSNCON

REGISTRATION WILL OPEN SOON!

8th to 11th February, 2024

Venue: Hyderabad International Convention Centre (HICC) Hyderabad, Telangana

2024 HYDERABAD ISNSCCON
8th 9th 10th & 11th FEBRUARY

HYDERABAD NEPHROLOGY FORUM

REGISTRATION TARIFF (*All Amounts in INR)

Category	EARLY BIRD Till NOV 30TH 2023	REGULAR Dec 1st 2023 onwards till January 30th 2024	SPOT REGISTRATION January 31st 2024 onwards
Delegate	7000	10000	12000
Postgraduate	3000	5000	6000
Accompanying person	6000	9000	11000

ONLINE REGISTRATION CLOSED BY 30TH JANUARY 2024

Terms and conditions :

Registration fee is exclusive of GST 18%
Accompanying person above age 12 years need to be registered.

Registration fee includes :

Admission to scientific program, Lunch and Dinner, refreshment during breaks
Registration material and participation kit, certificate
Accompanying person : Lunch and Dinner, refreshment during breaks

Cancellation policy:

Till 15th January 2024, 50% cancellation fee & 50%refund will be processed.
After 15th January, no refunds! Cancellation requests have to be received by the mail: isnsccon2024@gmail.com

Payment Details:

Account Name: NEPHROLOGY FORUM,
Bank Name: Union Bank of India,
Account Number: 107910100032051
IFSC: UBINO810797
Brand Name: NIMS BRANCH,
Address: DEPARTMENT OF NEPHROLOGY, BRANCH NIMS
Pancard No: AABAN7890F

Photos from WCN, Bangkok, March 2023

ISN CME Committee Meeting at WCN, Thailand. Chair Dr Sydney Tang and Deputy chair Dr Manisha Sahay

Dr Liz lightstone, Dr Suzanne, Dr Manisha Sahay and Dr Kajaree at WCN

Dr Chirag Parikh, the biomarker man for AKI and Dr Manisha Sahay at WCN

Dr Manjusha Yadla with other Indian and International Delegates at WCN

WIN India booth at WCN

WCN Symposium on HIF PHIs

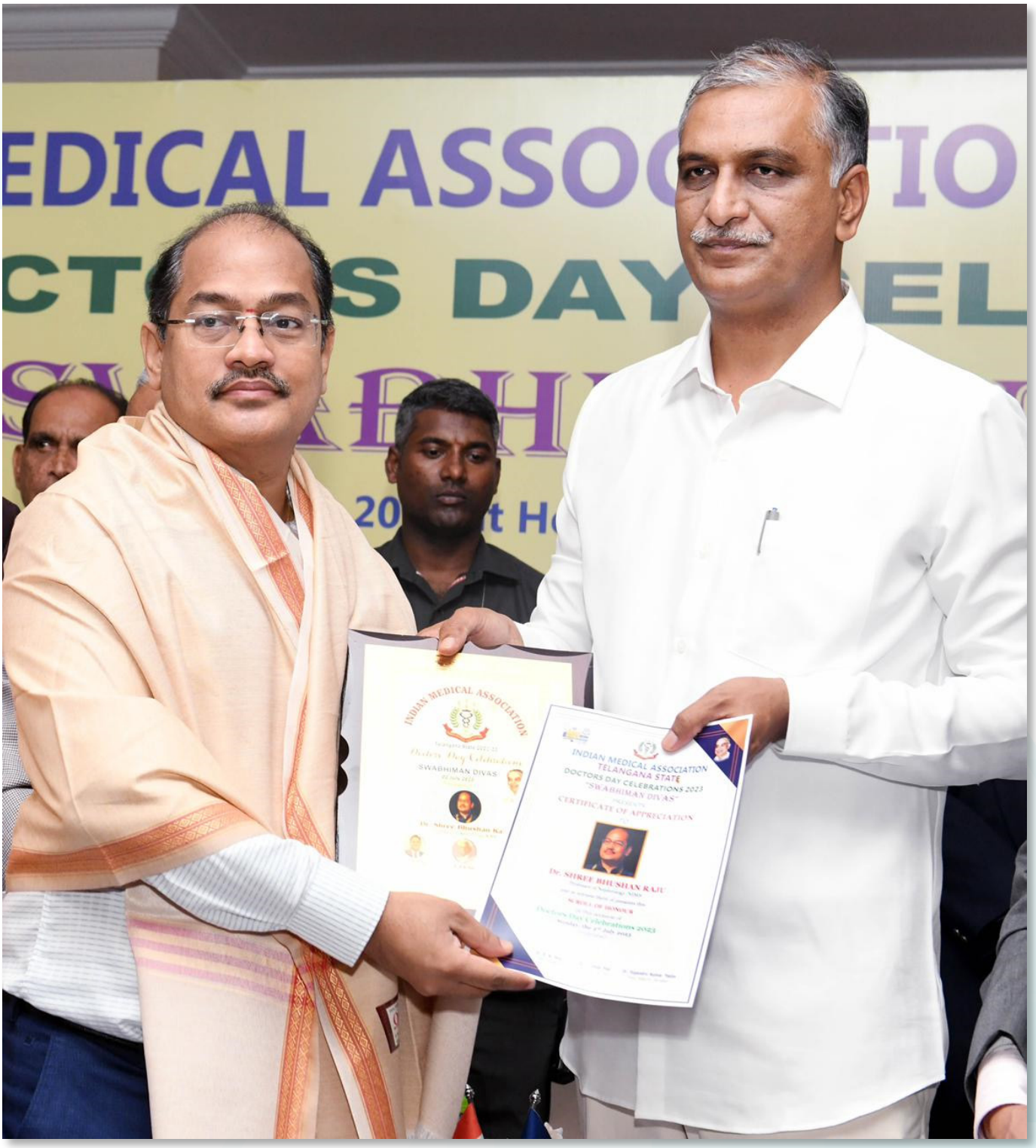
ISN South Asia Regional board meeting at WCN Thailand

Photos from Renal Transplant Symposium, Hyderabad, March 2023

Photos from AINU Transplant Conclave, Hyderabad, May 2023

Photos from a CME program, SGPGI, Lucknow, May 2023

Dr Swarnalata was invited as a Expert Guest Faculty for a CME conducted at SGPGI



Dr Sree Bhushan Raju receiving an award from Health Minister on the National Doctors Day event

Photos from PD Workshop at NIMS, April 2023

HNF members releasing the March issue of Kidney Digest Newsletter

Fitness Corner

MEDGENIX

Nuronix LC
L-Carnitine, L-Tartrate 500mg,
Folic Acid 1.5mg, Methylcobalamin 1500mcg

Preganix M
Pregabalin 50mg, Methylcobalamin 500mcg Capsules

Preganix
Pregabalin 25mg & 50mg Capsules

Dapmed
Dapagliflozin 5mg & 10mg Tablets

Tolvanix
Tolvaptan 15mg Tablets

Farogenix
Faropenem 200mg & 300mg Tablets

Febugenix
Febuxostat 40mg Tablets

PBGenix
Pre-Probiotic 15 Billion C.F.U

Pbforte
Pre-Probiotic 45 Billion C.F.U

Sevanix
Sevelamer Carbonate 400mg & 800mg Tablets

Nephro MV
Multivitamin Capsules

Nephro Fe
Elemental Iron + Multivitamin Capsules

Sobinix
Sodium Bicarbonate 500mg Tablets

Sobinix DS
Sodium Bicarbonate 1000mg Tablets

Stacegen
Moisturizing Lotion

Calci
Calcitriol 0.25 mcg Soft gelatin Capsules

Calci CZ
Calcitriol 0.25 mcg +
Calcium Carbonate Soft gelatin Capsules

Defort
Deflazacort 6mg & 30 mg Tablets

Mycograft 180mg
Mycophenolate Sodium 180mg Tablets

Mycograft 360 mg
Mycophenolate Sodium 360mg Tablets

Tacronix
Tacrolimus 0.5mg, 1mg & 2mg Capsules

Valnova
Valganciclovir Hydrochloride 450mg Tablets

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