

Annual Report
Division of Nephrology
Department of Medicine - Jewish General Hospital
Jan 1, 2015 - Dec 31, 2015

SUMMARY

1. Research & publications

The Division has continued to expand its research activities with three ongoing local investigator-conceived and implemented studies. This is in addition to the division participating in several multi-center clinical trials as well as the fundamental research taking place in Dr. Lipman's laboratory. Details are presented below in Section II.

2. Teaching and learning

The Division of Nephrology at the JGH continues to serve as a training site for the McGill Renal Fellowship program. Fellows rotate through our peritoneal dialysis program and the consulting service. The feedback from the fellows on the JGH experience has been uniformly positive. In addition, McGill internal medicine residents and medical students do rotations on the nephrology consult service. Typically we have 2-4 individuals at any given time on the service.

Three of our nephrologists also act as attending staff on the medical CTUs. In an average year we provide 12 weeks of CTU service.

We also give many lectures throughout the year including Grand Medical Rounds, Core teaching for internal medicine, and core lectures for nephrology fellows. We also participate in teaching at the undergraduate level both through lecture series and through small group teaching at the medical school.

Teaching activities (outside of CTU & nephrology service)

Core Medicine lecture series:

Dr. D. Bercovitch
Dr. M. Davidman
Dr. M. Lipman
Dr. G. Frisch
Dr. S. Nessim

University teaching:

Dr. G. Frisch & Dr. S. Nessim:

Medicine I Physiology: Small group tutorials - Renal section: 18 hours/year each
Back to Basics Acid-Base - 6 hours/year each

Dr. M. Lipman, Dr. Frisch, & Dr. Nessim:
McGill Renal fellow seminar series, 2 hours/year each

Dr. M. Davidman:
McGill Anesthesia resident seminar series - Fluids and electrolytes, acid-base and renal disease - 3 hours/year

Undergraduate medical student lectures:

Dr. D. Bercovitch, Hypertension, 6 hours

Dr. M. Davidman, Renal failure, 6 hours

Dr. M. Lipman, Electrolytes, 6 hours

Dr. G. Frisch, Electrolytes, 6 hours

Dr. S. Nessim, Hypertension, 6 hours

3. Involvement in the community

Drs. Lipman, Frisch, and Nessim give several CME rounds throughout the course of the year included at the McGill Refresher Course as well as JGH family medicine rounds amongst others.

Dr. Frisch has been actively involved as a fundraiser for Combined Jewish Appeal.

4. Partnerships

Dr. Lipman is actively engaged in research partnerships with Drs. Ernesto Schiffrin and Andrew Karaplis at the Lady Davis Institute for Research, and with Drs. Marcelo Cantarovich and Steve Paraskevas at the MUHC. In addition, Dr. Lipman has a collaborative research project with Dr. Marie Briet from the Hopital Europeen Georges-Pompidou Hospital in Paris, France. Dr. Nessim has research collaborations with Dr. Joanne Bargman, among others, at the University of Toronto.

5. Milestones: None to report.

6. New hires, promotions, and retirements: None to report.

7. Honours, awards, and prizes: None to report

8. Fundraising

The Division of Nephrology is actively partnering with the Foundation of the Jewish General Hospital to raise money for a relocation and expansion of our hemodialysis facilities.

SECTION I- DIVISION STATUS UPDATE

1. Mission and objectives of the Division

The Division of Nephrology continues to provide excellence in patient care and teaching. In addition, although the division is small in terms of the number of members, there is significant activity in fundamental, translational, and clinical research domains.

Our satellite dialysis unit is in its sixth full year of service. The unit is located on the ground floor of Pavilion H. This past year the satellite unit was expanded with the addition of six hemodialysis stations. This expansion will allow us to accommodate up to 18 more hemodialysis patients. We have applied to the Agence de Montreal for operating funds for the additional stations.

We also continue to operate out of our original hemodialysis unit in Pavilion G. This unit is running at almost full capacity using 16 dialysis stations, three sessions per day, 6 days per week. This unit serves all our dialysis patients who are admitted to hospital as well as our more fragile out-patients.

The Kidney Treatment Centre (pre-dialysis clinic) which is located adjacent to the satellite dialysis unit in Pavilion H is in its fifth year of operation. The clinic provides the necessary educational, dietary, and psychological support to patients with progressive kidney failure and to their families. These programs have been shown to slow the decline of renal function in participants. In addition, the team in the pre-dialysis clinic helps patients make the often difficult transition to dialysis therapy. This clinic now handles over 250 patients with Stage III and Stage IV CKD.

Our peritoneal dialysis program has continues to be among the largest in Montreal. We currently have over 40 patients in this program. Of our total dialysis population 18% are on peritoneal dialysis as their mode of therapy. This figure is substantially higher than the provincial average of 12%.

We continue to aggressively promote renal transplantation to our patients as the preferred option for the treatment of end-stage renal disease. We emphasize the value of pre-emptive transplantation in order that the patient may avoid dialysis and we encourage donations from both living-related and living-unrelated donors.

2. List of academic staff

Full-time JGH based:

Dr. David Bercovitch	Associate Professor of Medicine	GFT-H
Dr. Michael Davidman	Associate Professor of Medicine	GFT-H
Dr. Gershon Frisch	Assistant Professor of Medicine	GFT-H
Dr. Mark Lipman	Associate Professor of Medicine	GFT-H
Dr. Sharon Nessim	Assistant Professor of Medicine	GFT-H

Associate staff:

Dr. Johanna Eid
Dr. Paul Bourgoïn
Dr. Natalie Ng Cheung
Dr. Ramsey Sabbagh
Dr. Andrea Palumbo

SECTION II- GRANTS, PUBLICATIONS, AND SERVICE OUTSIDE MCGILL

1. Grants

Peer reviewed: none

Industry sponsored:

Dr. Lipman

A Comparison of Effects of Standard Dose vs. Low Dose Advagraf with IL-2 Receptor Antibody Induction, MMF and Steroids With or Without ACEi / ARB - based Antihypertensive Therapy on Renal Allograft Histology, Function, and Immune Response

Sponsor: Fujisawa Canada

Dr. Lipman in collaboration with Dr. Ernesto Schiffrin

Gene expression profile in small resistance arteries of patients with hypertension with or without nephroangiosclerosis and its relations to small and large artery function and remodeling

Sponsor: Servier Institute

Investigator initiated:

Dr. Lipman and Dr. Nessim

Effect of vitamin D3 supplementation on arterial and bone remodelling in chronic kidney disease patients

The pharmacodynamic and pharmacokinetic profiles of apixiban in hemodialysis patients

2. Research Trainees:

Dr. Thomas Mavrakanas, Nephrology Fellow, McGill University

Dr. Tofol Al-Nashmi, Vascular Fellow, McGill University

3. Publications:

Nguyen M-T, Fryml E, Sahakian SK, Liu S, Cantarovich M, Lipman M, Tchervenkov JI, Paraskevas S. Pre-transplant recipient circulating CD4+CD127-TNFR2+ Treg: a surrogate of Treg suppressive function and predictor of delayed and slow graft function after kidney transplantation. *Transplantation*, 2015 Oct 1. [Epub ahead of print] PMID: 26425877

Misra PS, Alam A, Lipman ML, Nessim SJ. The relationship between proton pump inhibitor use and serum magnesium concentration among hemodialysis patients: a cross-sectional study. *BMC Nephrol*. 2015 Aug; 16:136

Dubrofsky L, Lipman ML, Nessim SJ. Make Your Diagnosis: Hypercalcemia in a renal transplant recipient. *Kidney Int* 2015 Nov; 88(5): 1207-8.

SECTION III-CONFIDENTIAL INFORMATION

1. Consulting activities: None

Respectfully submitted,



Mark L. Lipman, M.D.
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