# 25/HH/SCM

**Nephrology and Transplantation: Medicine, Surgery, Immunology**

**Module Tutors:**

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**Reporting instructions**

Attend the Monday morning ward round starting at 0815 on De Wardener Ward on the 2nd floor of the Renal Building, Hammersmith Hospital. You will be greeted there.

**Module Aim**

The aim of this module is to give interested students a broad experience of the medical, surgical and immunological aspects of nephrology and renal transplantation.

**Background Information**

The West London Renal and Transplant Centre is the biggest of its kind in Europe. We perform at least 150 renal transplants per year including those patients at high immunological risk. Similarly, the vasculitis clinic and research department enjoy an international reputation. We have a large number of clinical academics involved in research, from basic science to clinical outcome studies. We have extensive experience in training medical students, SHOs and SpRs, as well as qualified physicians and surgeons who come from abroad to gain experience at our centre.

**Key Learning Events**

1. Face-to-face tutorials with the module leaders.

2. Pre-operative evaluation and post-operative follow-up of transplant patients.

3. Participation (scrubbed and actively assisting) in renal transplant operations (and other surgical procedures if desired).

4. Observe the spectrum of immunological work-up of transplant patients in the tissue-typing laboratory.

5. Observe various basic laboratory techniques within the Imperial College Kidney and Transplant Institute.

6. Attendance of vasculitis and transplant clinics.

7. Attendance of the MDT meetings and Grand Rounds of the Renal and Transplant Unit.

**Key Learning Outcomes**

The students will be able to:

(1) “Clerk in” a potential renal transplant recipient and present the case to the ward registrar or consultant.

(2) Describe, and give examples of the medical and immunological work up of renal transplant patients.

(3) Broadly describe the spectrum of renal vasculitis and its treatment.

(4) Outline the surgical procedure of renal transplantation together with first-hand experiences of the operation.

(5) List the post-operative complications of renal transplantation (medical and surgical) together with first-hand experiences.

(6) Define the concept of “bench to bedside” scientific endeavour and describe some of these processes in place at the Imperial College Kidney and Transplant Institute.

**Recommended Reading**

1. Book: Hakim N. (1996) Introduction to Organ Transplantation. Imperial College Press
2. Book: O’Callaghan C. (2006) The Renal System at a Glance. WileyBlackwell
3. Salama AD and Pusey CD (2006) Drug insight: rituximab in renal disease and transplantation Nat Clin Pract Nephrol. 2006 Apr;2(4):221-30. Review
4. Salama AD and Levy JB (2003) Tolerance and autoimmunity in anti-GBM disease. J Am Soc Nephrol. 2003 Nov;14(11):2988-9
5. Jayne DR et al (2007) Randomized trial of plasma exchange or high-dosage methylprednisolone as adjunctive therapy for severe renal vasculitis. J Am Soc Nephrol. 2007 Jul;18(7):2180-8.

**You will also be given reading material on arrival – please bring a memory stick.**

**Assessment**

Every student will be asked to give a presentation of either (1) a transplant patient’s journey to the post-operative period or (2) a vasculitis patient’s journey from symptoms to diagnosis and treatment. The presentation will contain reference to the modern literature. This should demonstrate acquisition of the learning outcomes specified above.

**Periods when the module is available:**

1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13

**Maximum number of students at any one time**:

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