

25 FEB 2027

26 FEB 2027

HUCAD Kidney Transplantation **Surgical Instrumentation for Nurses**

**ADVANCED
EDUCATION**
NOVA MEDICAL SCHOOL



COURSE PRESENTATION

Kidney transplantation is the treatment of choice for most patients with end-stage kidney disease, whether they are receiving peritoneal dialysis or haemodialysis, or are in the pre-dialysis phase. It is recognised as an effective treatment that can significantly improve quality of life. Kidney transplantation requires a highly specialised multidisciplinary team and technically complex surgical procedures. The scrub nurse plays a pivotal role throughout all stages of the operative process, from preparing the operating room and surgical instruments to organ retrieval, back-table preparation of the graft (bench surgery), and assisting with kidney implantation in the recipient.

This course covers the anatomical, physiological, and technical principles of kidney transplantation, with a particular focus on surgical instrumentation during open kidney retrieval from deceased donors, laparoscopic retrieval where applicable, graft preparation for implantation, and assistance with vascular and ureterovesical anastomoses. The training emphasises the integration of theoretical knowledge and practical skills development, promoting the acquisition of competencies that support patient safety, quality of care, and optimal surgical outcomes.

LEARNING OBJECTIVES

1. Understand the fundamental principles of kidney transplantation and the organisation of the organ donation and transplantation process.
2. Identify the surgical anatomy of the kidney, renal hilum, major abdominal vessels, and iliac region relevant to kidney transplantation.
3. Appropriately prepare the operating room, equipment, surgical instruments, and consumables required for kidney retrieval and implantation procedures.
4. Provide surgical instrumentation for open kidney retrieval from deceased donors, anticipating the different stages of the surgical procedure.
5. Understand the technical principles of laparoscopic kidney retrieval and prepare the specific equipment and instruments required for this procedure.
6. Assist with back-table preparation of the kidney graft, identifying the instruments and materials used for dissection, vascular reconstruction, and final graft preparation.
7. Support the surgical team during kidney graft implantation, particularly in the preparation of the iliac vessels, performance of vascular anastomoses, and reconstruction of the urinary tract.
8. Identify and manage the surgical instruments, suture materials, and devices used in vascular surgery and kidney transplantation.
9. Strictly apply the principles of aseptic technique, surgical safety, graft traceability, and prevention of intraoperative complications.
10. Develop competencies in communication, teamwork, anticipation of the surgeon's needs, and efficient management of the operating room environment.
11. Integrate the principles of continuous quality improvement and patient safety into perioperative nursing practice in kidney transplantation.

COORDINATOR



Carla Gago, RN

FACULTY

**Carla Gago
Helena Sousa
José Reis
Teresa Rua**

PROGRAM

IN-PERSON

NOVA Medical School | Campus Carcavelos

20H

DAY 1 | 25/02/2027

8h00 – 19h00

Introduction to the Fundamentals of Kidney Transplantation for Nursing

- Introduction to kidney transplantation.
- Epidemiology and indications for kidney transplantation.
- Organisation of transplantation programmes and functioning of the multidisciplinary team.
- Role of nursing in the organ donation and transplantation pathway.
- General eligibility criteria for living donors and deceased donors declared dead by neurological criteria.
- Organ assessment, allocation, and transportation: general principles.
- Ethical, legal, and regulatory considerations relevant to nursing practice.
- General principles of organ preservation.
- Nursing care during the preoperative, intraoperative, and immediate postoperative periods.
- Introduction to the procedures and techniques to be covered in the face-to-face practical component.

Nursing in Kidney Retrieval

- Surgical anatomy relevant to kidney retrieval.
- Organisation of the organ retrieval team and retrieval pathway.
- Roles of the scrub nurse and circulating nurse during kidney retrieval.
- Surgical sequence for kidney retrieval from a deceased donor declared dead by neurological criteria.
- Specific surgical instrumentation.
- Perfusion, preservation, and packaging of the kidney graft.
- Maintenance of sterility and prevention of contamination.
- Patient safety and prevention of adverse events during organ retrieval.
- Communication and coordination with organ retrieval and transplantation teams.
- Review of key concepts.

Nursing in Laparoscopic Nephrectomy for Living Donors

- General eligibility criteria and assessment of living donors.
- Laparoscopic anatomy relevant to nursing practice.
- Operating room preparation for laparoscopic nephrectomy.
- Specific laparoscopic equipment and instrumentation.
- Roles of the scrub nurse and circulating nurse during the different stages of surgery.
- Surgical sequence: patient positioning, trocar placement, hilar dissection, vascular control, and graft extraction.
- Preparation of equipment and materials for kidney perfusion and preservation.
- Minimisation of warm ischaemia time: team coordination strategies.
- Management of intraoperative complications and response by the nursing team.
- Patient safety, surgical safety checklist, and organ traceability.

PROGRAM

IN-PERSON

NOVA Medical School | Campus Carcavelos

20H

DAY 2 | 26/02/2027

8h00 – 19h00

Nursing in Back-Table Preparation of the Kidney Graft

- Concepts and objectives of back-table preparation of the kidney graft.
- Organisation of the back-table setup and preparation of surgical instruments and equipment.
- Specific instrumentation for kidney graft preparation.
- Roles of the scrub nurse and circulating nurse during the procedure.
- Identification of relevant anatomical variants.
- Support for simple vascular reconstructions performed by the surgical team.
- Maintenance of graft perfusion and preservation, including temperature control.
- Graft traceability, documentation, and organ safety throughout the process.
- Communication and coordination with the transplantation team.

Nursing in Kidney Graft Implantation and Vascular Anastomoses

- Operating room preparation for kidney graft implantation.
- Surgical anatomy of the iliac vessels relevant to nursing practice.
- Roles of the scrub nurse and circulating nurse during graft implantation.
- Specific instrumentation for vascular anastomoses.
- Surgical sequence of kidney graft implantation.
- Preparation of materials for arterial and venous anastomoses.
- Ischaemia time management and coordination of the perioperative team.
- Assistance during graft reperfusion and monitoring of the materials and devices used.
- Nursing team response to anatomical variants and intraoperative complications.
- Patient safety, graft traceability, and procedural documentation.

Nursing in Urinary Tract Reconstruction and Management of Surgical Complications in Kidney Transplantation

- Surgical anatomy of the bladder and ureter relevant to nursing practice.
- Specific instrumentation for ureteroneocystostomy.
- Preparation and management of materials, devices, and ureteral stents.
- Surgical sequence of urinary tract reconstruction.
- Nursing responsibilities in maintaining asepsis and safety throughout the procedure.
- Recognition and initial management of vascular, urological, and infectious complications.
- Communication and team response to intraoperative complications.
- Immediate postoperative nursing care related to urinary tract reconstruction.
- Perioperative team response algorithms for managing surgical complications.

COURSE FEES: 300€

Application Fee: **50€**
Tuition fee (including insurance +
course meals): **250€**

APPLICATION REQUIREMENTS

- Bachelor's Degree in Nursing
- Valid registration with the Portuguese Order of Nurses (Ordem dos Enfermeiros)
- Demonstrable professional experience in the perioperative setting (operating room)
- Basic competencies in surgical instrumentation, aseptic technique, and patient safety
- Availability to participate in theoretical and practical training, including simulation-based training
- Curriculum Vitae (CV)

ADMISSION CRITERIA

Applicable when the number of applicants exceeds the number of available places:

- Level and duration of operating room experience, preferably in urology or minimally invasive surgery
- Previous experience with laparoscopic techniques
- Relevant additional training in the perioperative field
- Assessment of motivation (motivation letter and/or interview)
- Order of application submission in the event of a tie

MAX. PARTICIPANTS: 12

ATTENDANCE REQUIREMENTS

Issuance of the certificate of attendance with assessment is conditional upon participation in at least 90% of the course sessions.

LANGUAGE

English
Portuguese

PROGRAM MANAGER



EDUARDO PARREIRA

ADDITIONAL INFORMATION

For more details, please contact the Program Manager:

T: (+351) 910 959 816 | 911 191 954

formacaoavancada@nms.unl.pt

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The organisation of each course is subject to a minimum number of participants. Should this minimum number not be reached, we reserve the right to cancel the course, with participants being notified no later than 20 days prior to the scheduled course date.

In such circumstances, we accept no liability for any costs, expenses, or charges incurred by participants in connection with bookings or services arranged for the purpose of attending the course, including travel, accommodation, or any other related services.