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## Workshop brachytherapy bronchus

# Work of the nurse in the procedure of endobronchial brachytherapy (Hdr)



Yolanda Parra Hernández, Ana Belén Piñeiro Danis,  
María José Fariñas Rivas, Pilar Taladriz Cobas

University Hospital Complex of Vigo (CHUVI), Spain

### 1. Patient programming

The nurse responsibilities start with the case presentation at the committee of brachytherapy. At this point, treatment is being decided.

After being accepted for treatment, we perform the consultation, ensuring consents are signed, and we indicate the procedure dates.

Next step is to schedule and manage a preoperative appointment and the patient's admission. A week later, a treatment session is programmed.

### 2. Preparation of the operating room

#### 2.1. Material

Another nurse responsibilities are to provide and prepare all material required to perform the technique:

- Apparatuses: respirator, material of intubation, 2 suction systems, oxygen, O<sub>2</sub> bullet to move the patient and a portable monitor.
- Sedation medication tray: Midazolam and Fentanilo.
- Emergency medication tray: ephedrine hydrochloride, atropine and muscle relaxants.
- Intravenous fluid supply.
- Surgical table: sterile gloves, surgical dressings, simulation source, endobronchial catheter (length 150 cm, size 5 or 6 Fr depending on the characteristics of the patient or requirements of the pneumologist), guide for catheter and sterile gloves leaded.
- Personal protective clothing (aprons and leaded thyroid shields).
- Material for bronchoscopy.

### 3. Procedure

The day of the technique we should have in the control area: general history, radiotherapy history, signed consents and complete preoperative studies results.

The nurse, radiotherapy technician and nurse assistant prepare the operation room and check that all the equipment is operational.

In the patient's room we canalize a peripheral vein and extract a blood sample for analytical.

In the operation room we monitor vital signs (CF, blood pressure and O<sub>2</sub>Sat with VMK 50%); and we continue monitoring the patient until he/she is discharged from the service.

When signaled by the pneumologist, the circulating nurse starts the sedation while the instrumentalist helps catheter introduction and fixing with the other nurse and pneumologist.

While performing CT and dosimetric calculations, we try to ensure that the patient is as comfortable as possible, administering medication to prevent cough and pain.

Once the treatment has been administered, we withdraw the catheter and transfer the patient to the room (with the technician help) with nasal cannula at 3l per minute.

Patient is kept in the supine position. After 1 h, we start oral tolerance and 2 h later, if there are no complications, the patient is discharged home.

In the event that the patient presents acute complications, he would be admitted to hospital.

Finally, when the patient is discharged, we provide interim report of the treatment received and the appointment scheduled for the following day.