## UROLOGIC N.DO INJECTORS PROTOCOL

## **Indications:**

- 1) Local anesthesia for the following procedures;
  - a) Small Turbt where the lesions are superficial at the mucosa's level and not larger than 3 cm.

It can also be used on multiple lesions but always at the level of the mucosa.

- b) Bladder Mapping
- c) Bladder Biopsies
- d) TUIP (Transurethral prostatic engravings)
  Any kind of local anesthetic is fine, even if it is preferable the Naropin 7.5
- 2) Drugs injections and chemotherapy into the bladder
- 3) Toxic Botulinum injection

## Where is performed the injection before the Turbt:

The injection is performed into the submucosa at the plant base around the lesion. Normally are made n. 3 injections of 1 cc each around the lesion. With mapping bladder, biopsies and TUIP, have to be made between 1 and 3 injections depending on the case.

The Ndo-injector allows to perform till 30 injections on the same patient.

## **Surgical procedure:**

The Ndo-injector is inserted into the channel of a rigid cystoscope. The insertion is made with the needle portrait. The area where performing the injection has to be localized but before reaching the tissue, the needle gets out of 4 mm. This is the length that allows the specialist to reach the submucosa, after that is possible to prick and inject the solution. The needle comes out by means of a roller clamp operated by the physician, while the solution is a syringe connected to the luer lock needle. Is recommended a sedation to the patient with intravenous Midazolam (1,5 - 2,0 mg).

Physion Ndo Injector has a curved needle tip that helps the operator to reach the bladder wall and bladder neck in a easier way respect needles with straight tips.

The slider will advance every 2 mm till 16 mm for a better handling control when reaching the target lesion.



