

Percutaneous access sheath for the surgical treatment of urinary lithiasis

Description

Urinary lithiasis or urinary calculi is a disease with a high incidence in both developed and emerging countries, which carries a high cost worldwide, both in terms of health care costs (material and human) as well as work level.

The use of percutaneous access sheaths for the surgical treatment of urinary lithiasis is a widely known technique. However, the conventional sheaths have several disadvantages such as, for example, the friction that makes the edge of the conventional access sheath with the flexible nephroscope, or the risk that the sheath migrates into the patient.

The experience of inventors in the management of urolithiasis has favored the development of the present invention. This Utility Model consists of a disposable percutaneous access sheath to which has been provided with an improvement: a funnel-shaped segment attached to the front end of the sheath that prevents migration of the sheath into the patient, reduces the friction with the endoscopic material and allows easy introduction of material through it.

Employing this improved percutaneous access sheath will reduce part of the actual costs associated with the management of this disease, resulting in a tool as useful as necessary, in the field of urinary lithiasis.

It can be manufactured in different diameters and lengths, depending on which endoscopic equipment is used.

Technical Advantages

The invention proposed here has the following advantages:

- i. prevents friction with the flexible nephroscopy and extends its half-life
- ii. allows easy introduction of material to be used, both rigid and flexible material
- iii. prevents migration of the sheath into the patient's body



Status of technology development and intellectual property

A prototype has been manufactured in order to use it in experimental models with a high degree of satisfaction. Utility Model granted in 2011 by the Spanish Patent and Trademark Office.

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