## **Ialuadapter in Practice**

The local treatment of the bladder with a catheter has been among the therapeutic methods for a long time. However, the issues associated with this device – pain and the risk of mucosal lesions – makes catheterization sub-optimal. There has been a study about a special adapter whose use, as the article says, makes the treatment safe and comfortable.

Administering medicine into the bladder via instillation is a common practice in the treatment of bladder cancer to lessen the chance of relapses, interstitial cystitis/bladder pain syndrome (IC/BPS), chronic bacterial bladder infections or after the radiation therapy of the pelvic area. In most cases, a catheter is being used even if, as the authors of a Hungarian study say, in each case of administration there is a chance for the known issues occurring: micro- or macrovascular lesions of the bladder mucosa, pain, bleeding and the increased risk of infections. [1] In case of 70% of the IC/BPS patients urethral pain or hypersensitivity can be observed, too. The continuous chemical irritation of the urine which is present results in the chronic inflammation of the urethral mucosa causes the symptoms.

## **Tested on 270 Patients**

In this study the authors are introducing the adapter which was developed by them. It can be attached both to Luer Lock and Luer Slip syringes. After the disinfection of the urethral orifice and the nearby areas, the tip of the adapter can be led into the urethra. Gentle pressure is to be applied to the syringe so that the adapter can establish full contact with the periurethral mucosa. Then can the medicine through the urethra, into the bladder administered. For this sort of retrograde instillation, no catheter need be used.

270 IC/BPS patients were tested – 243 women and 27 men –, 1520 bladder instillations were performed. The results confirmed the efficiency of the process. In case of five female patients the syringe adapter could not be applied, due to the fact that the urethral orifice was located too deep, and/or the vaginal opening was scarred. This means, that the success rate of the adapter was 98% in case of female patients. For male patients, this rate was 100%, no difficulties were experienced.

The safety and compatibility of the adapter have been examined, too. No bacterial infections caused by the instillation were observed. Pain, long-lasting burning sensation or any other complications were not experienced either. 100% of the patients were content with the treatment. All of them preferred the catheterless instillation to the traditional catheterization; no person of the test group stated that they "would consider using a catheter again", said the authors.

Author: Dr. Lydia Unger-Hunt

## Reference

1. Lovasz S (2019) Minimally invasive device for intravesical instillation by urological syringe adapter (MID-ii U. S. A.) for catheter-free instillation therapy of the bladder in interstitial cystitis/bladder pain syndrome. Int J Urol 26 (Suppl 1):57–60. https://doi.org/10.1111/iju.13976

## What sort of advantages of the adapter can be pointed out, compared to catheterization?

**Dr. Alexander Dürer:** The catheter goes directly into the bladder, whereas the adapter enters only the urethral orifice. It can be properly attached to the orifice if some gentle pressure is applied. Then the medicine is ready to be administered. Most patients find the adapter clearly more comfortable than a catheter. According to my experience, many patients become more relaxed by the sheer fact that there will be no catheterization. However, there is a small number of patients who still prefer catheters; most probably because with the adapter some pressure needs to be applied to the orifice. For me, the therapist, the adapter can spare some time, because I do not have to prepare the catheter. I attach the adapter to the syringe and I can start the treatment instantly.

J. Urol. Urogynäkol. AT 2019 · 26:103 https://doi.org/10.1007/s41972-019-00079-1 © Springer-Verlag GmbH Austria, ein Teil von Springer Nature 2019