

Catheter-free Instillation

Performing the local therapy of the bladder with a special adapter is safe and more comfortable for the patients than the use of a catheter, which is the traditional way of the therapy. Intravesical instillation has been approved by the therapists, too.

According to the experts of the Swiss Society of Gynaecology and Obstetrics (SSSG; Schweizerische Gesellschaft für Gynäkologie und Geburtshilfe), in spite of the common belief, urine is not sterile, in itself.[1] They point it out that asymptomatic bacteriuria affects 1–3% of the young women, its prevalence in postmenopausal women is 13.6–22.4%. However, according to the experts, this does not mean that starting a treatment is always necessary. Non-pregnant women need not be routinely screened or treated (in case bacteriuria is diagnosed) – but, it is something that should be treated before any urogynecological intervention.

Less Relapses in Case of recurring UTIs

Approximately 50% of the women have acute urinary tract infection (UTI) in their lives. At least 25% of them face another infection, too. In case of complication-free UTIs, if there has been no treatment applied, the chance that pyelonephritis develops, is approximately 1–3%. According to SSSG, both to treat the acute phase of the UTI and to prevent another infection, besides applying d-mannose, local estrogen therapy (in case of postmenopausal women) and uropathogen E-coli strain extract, it is recommended to administer hyaluronic acid and chondroitin sulphate via intravesical instillation. These substances are among the components of the glycosaminoglycan layer (GAG-layer) of the bladder. Certain health insurances even cover this therapy. Moreover, intravesical instillation is used in the treatment of bladder cancer to lower the risk of relapses, interstitial cystitis/bladder pain syndrome (IC/BPS), chronic bacterial infections and after a pelvic radiotherapy for recovery purposes.

In most cases, intravesical instillation is performed with a catheter – even if it is well known that the device itself may cause micro- or macrovascular lesions, pain, bleeding, and it raises the risk of infections, too, according to the authors of a Hungarian study [2].

Tested on 270 Patients

A test was performed to examine the adapter which had been developed by them and which can be attached to Luer Lock and Luer Slip syringes, too. First the urethral orifice and the nearby areas shall be disinfected, then the adapter is to be inserted into the orifice. Gentle pressure is to be applied to the syringe so that the adapter can establish full contact with the periurethral mucosa. In the next step, the administration of the solution, through the urethra into the bladder can begin. This process enables a retrograde instillation of the medicine, in the bladder, through the urethra, without a catheter. 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.

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