

Effects of intravesical instillations with hyaluronic acid on iatrogenic cystitis

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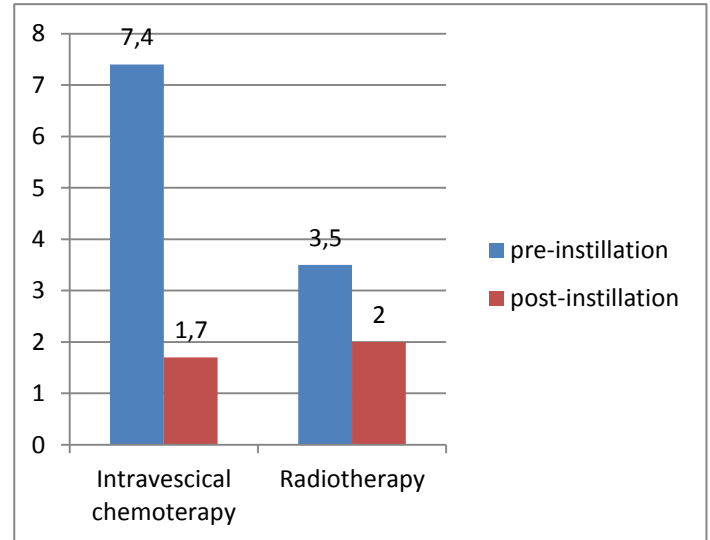
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Aim of the study

Iatrogenic cystitis is a common complication of pelvic radiotherapy for prostate cancer and intravesical chemo-immunotherapy for non-muscle invasive bladder cancer. Common signs and symptoms of this condition are pelvic pain, pollakiuria, urinary urgency, dysuria, haematuria and deterioration of quality of life. This clinical picture is due to the epithelial damage and is very similar to interstitial cystitis, which is the principal indication of hyaluronic acid instillations. The purpose of our study is to evaluate the impact of instillation therapy with hyaluronic acid on lower urinary tract symptoms (LUTS), quality of life and morphological urothelial aspects in patients who had developed cystitis after pelvic radiotherapy or intravesical chemo-immunotherapy with Bacillus Calmette-Guérine (BCG) or Mytomicin.



Materials and the methods

We have evaluated nineteen male patients undergone to bladder instillation therapy with hyaluronic acid for iatrogenic cystitis in the period 2012-2017. Of these, twelve (67%)

had developed cystitis after intravesical chemo-immunotherapy (seven with Mytomicin and five with BCG) and

seven (33%) had developed cystitis after pelvic radiotherapy for prostate cancer. Mean number of instillations was 19.6 in post-BCG/Mytomicin cystitis group and 14.3 in post-radiotherapy cystitis group. Mean age of patients was 74.8 years in the first group and 68.7 years in the second

group. We have investigated the intensity of urinary discomfort with a Visual Analogue Scale (VAS) and quality of life with I-PSS quality of life scale, before and after

intravesical instillation. We have also performed cystoscopy before and after the treatment to estimate variations in bladder capacity and urothelial aspect.

19 Patients undergoing ialuronic acid instillation

12 Intravesical CT 7 Radiotherapy

7 MMC 5 BCG

Results

The observed mean VAS improvement was 5.7 points (from 7.4 to 1.7) in the group of patients who had developed cystitis after intravesical immuno-chemotherapy, and 1.5 (from 3.5 to 2) in the group of patients undergone to pelvic radiotherapy. Quality of life improved in both groups, (2.8 points and 1.3 respectively). Furthermore, we have qualitatively observed a significant reduction of visible hyperaemic and erythematous areas at cystoscopy. No side effects due to hyaluronic acid have been witnessed

Conclusions

Hyaluronic acid bladder instillations significantly reduce urinary discomfort in patients with iatrogenic cystitis, thus improving patients' quality of life. The impact of this treatment is more significant in post-BCG/Mytomicin cystitis than in post-radiotherapy cystitis. In patients with iatrogenic cystitis, acid hyaluronic instillations can be considered a reliable and safe therapy to reduce irritative symptoms and improve quality of life, especially after intravesical chemoimmunotherapy. The adoption of a score to objectively estimate variations in bladder capacity and urothelial aspects should be highly recommended.