CS1-3

Pharmacological Treatment

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Disturbance of urine storage may lead to various forms of incontinence, mainly urgency and stress urinary incontinence. International continence society defined the symptoms of urgency, with or without urge incontinence, usually with frequency and nocturia as overactive bladder (OAB) syndrome. There are many underlining diseases and conditions in OAB patients and the severities of symptoms are different among patients. Of many OAB symptoms, urgency incontinence is one of the most bothersome symptoms. For treatment of urgency incontinence, antimuscarinic agents are now first-line therapy, despite doubts about the clinical significance of their clinical effectiveness. These agents reduce urgency, stabilize detrusor overactivity, and increase bladder capacity. Clinical use of antimuscarinic agents, however, is limited by the well-known side effects of dry mouth, blurred vision, constipation, and, in some cases, somnolence and impaired cognitive function. At present, several antimuscarinic drugs are available and new antimuscarinic drugs are now developing. Few drugs acting through other mechanisms have been found to be efficacious for treatment of OAB or urgency incontinence. Among these agents are intravesical capsaicin and resiniferatoxin, which selectively block afferent C nerve activity, and botulinum toxin injected into the bladder wall, which apparently blocks both afferent and efferent nerves. At present, however, these agents have limited use. Thus, the limitations of currently useful drugs with documented efficacy have stimulated research on new drugs for alternative targets. Although the promising effects have been demonstrated in animal models, a few of such drugs have passed the proof-of-concept stage. In this symposium, I will also present a brief update on some possible pharmacologic targets in the bladder smooth muscle and urothelium and central nervous system.

CS1-4

Surgical treatment for obstinate urinary incontinence

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The title applies to the vast range of issues, and should be narrowed down to the specific topic for a discussion. The focus of the study is the treatment for female SUI without a neurogenic disorder. In this study, ‘obstinate’ refers to the recurrent urinary incontinence (UI) after some preceding operations. Surgical treatment for UI has gone through changes over the years. And now the method of tension free midurethral backboard support seems to be regarded as the basis of the current surgical procedure. According to Nilsson, the study of the patients who underwent TVT shows that, in the seven-year follow-up, cure rate was 81%. In addition, the method was equally effective in groups of patients with uncomplicated genuine SUI, recurrent and mixed UI, and also those with ISD. Thus, some kind of recurrence results in mid and long term consequences to a little less than 20%. Against these results, TVT sometimes does not have an effect on the patient who has undergone multiple anti-incontinence surgeries, since such patient tends to develop advanced ISD. This condition is so called ‘obstinate’ incontinence. For these cases, application of the artificial urinary sphincter could be indicated, which is not practiced commonly in Japan due to various limitations. Here, the alternate method is needed. For the ‘obstinate’ cases, tension needs to be put on the sling in order to compress urethra because the urethra is too ‘bad’. However, excessive tension can cause sling erosion when synthetic materials are used. On the other hand, with a non-synthetic tissue material, one can apply force to tie sling without erosion. In Japan, neither of allograft nor xenograft are approved for use and therefore, the available option is only autograft. Thus, suburethral hammock method (Yamada, 2002) using patient’s rectus fascia has been performed in the obstinate UI cases. The results of this method and recent modification in technique will be presented.