

A PILOT STUDY ON WEB-BASED MONITORING BPH PATIENTS USING THE PERSONAL BPH CONTROL PROGRAM (PBCP)

Hypothesis / aims of study

As the aging society is going on, senile chronic conditions are increasing. Accordingly, the disease like BPH needs consequent management. Recently through the expansion of the communication infrastructure, diverse services network can be provided. Therefore, the concern on the distant medical management is increasing. We introduce the development about Personal BPH Control Program (PBCP) and the application to the clinical patients.

Study design, materials and methods

Baseline data such as International Prostate Symptom Score (IPSS), PSA, QOL, prostatic volume, maximum flow rate and postvoid residual urine were obtained when the first time visit to the clinic. These data were inputted into PBCP for calculating the severity score of BPH. According to the score, the patients had been classified as 5 groups. After the patient returned home and administrated the medication, we asked them to input the IPSS score and maximum flow rate on the digital survey through PBCP using internet once in two weeks. We educated the patients to measure the maximum flow rate using portable uroflowmeter invented by authors. According to the input elements, we have settled that the patients' condition was Good (maintain the dosage, visit the hospital every 3 to 6 months) when IPSS decreased, and maximum flow rate increased compared them with the baseline data. The patients' condition was Warning (adjust the dosage, visit the hospital every month) when IPSS and maximum flow rate were not improved, and the patients' condition was Urgent (visit the hospital immediately) when IPSS and maximum flow rate were aggravated. Doctors and patients could be communicated using web-based PBCP network and checked the data consecutively. To evaluate the efficacy of PBCP, we developed the questionnaire that consisted of four questions (Table). The question was scored by 5 grades ranging from "excellent" to "bad".

Table : The questionnaire for evaluate PBCP

Question	Answer
1. How about the feasibility to input the data?	Excellent—Good—Fair—Poor---Bad
2. Is it helpful to check the BPH data of yours?	Excellent—Good—Fair—Poor---Bad
3. Do you satisfy the PBCP?	Excellent—Good—Fair—Poor---Bad
4. How about the prospect of clinical application?	Excellent—Good—Fair—Poor---Bad

Results

20 patients with BPH were enrolled and their data were collected through the internet. The questionnaire was proposed to all patients after 3 months of study. The results show that "excellent and good" status was reported as follows: 60% in question 1, 85% in 2, 75% in 3, and 55% in 4. While "poor and bad" status was 10%, 0%, 0% and 5%, respectively.

Interpretation of results

We have developed a program which helps patients to adjust their visiting to the hospital and to understand the status of BPH, effectively. Most of patients in this pilot study expressed a high level of satisfaction with the PBCP.

Concluding message

We expect the great utility of the PBCP socioeconomically when applying it to patients. And according to the level of the disease, the symptom algorithm have accumulated sufficiently, we are going to report afterward the prospect about PBCP ahead.

FUNDING: Department of Urology, Chungbuk National University Hospital

CLINICAL TRIAL REGISTRATION: This clinical trial has not yet been registered in a public clinical trials registry.

HUMAN SUBJECTS: This study did not need ethical approval because This study has nothing with ethics problems.

And we got a permission from the patients involving this study. but followed the Declaration of Helsinki Informed consent was obtained from the patients.