

THE STUDY ON THE CORRELATION BETWEEN THE NATIONAL INSTITUTES OF HEALTH CHRONIC PROSTATITIS SYMPTOM INDEX (NIH-CPSI) AND THE INTERNATIONAL PROSTATE SYMPTOM POINT (IPSS)

Hypothesis / aims of study

The study performs the survey using the NIH-CPSI and the IPSS for the males in their 40s and 50s under the medical checkup and analyzes the correlation between the 2 indices.

Study design, materials and methods

The survey is performed using the NIH-CPSI and the IPSS for 244 males subjects in their 40s and 50s who visited the hospital for the medical checkup from January 1, 2010 to June 30, 2013. Sufficient explanation is provided to the subjects and the questionnaires filled in by the participants are collected. The collected questionnaires are analyzed and it is defined to have the symptoms of the chronic prostatitis if the total pain point of the NIH-CPSI is higher than 4 and the IPSS points are categorized as mild (1 - 8), moderate (9 - 19) and severe (20 - 35).

Results

The average age of the 244 subjects is 50.01 (40 - 59) with 96 subjects in their 40s and 148 subjects in their 50s. The total average points of the NIH-CPSI and the IPSS are 9.5 ± 6.8 and 11.2 ± 7.3 , respectively. The numbers of the subjects in the mild (1 - 8 points), moderate (9 - 19 points) and severe (20 - 35) classes are 89 (36.5%), (49.2%) and (14.3%), respectively. Seventy subjects of the survey show pathogenic bacteria of the chronic prostatitis (28.6%) and the pain, urination, quality of life and the total average points are 7.3 ± 3.4 , 3.8 ± 2.3 , 5.6 ± 2.2 and 16.8 ± 5.5 points, respectively based on the NIH-CPSI analysis. The pain, urination and quality of life points show weak correlation (Pearson correlation point < 0.5). In addition, the total IPSS point for the pathogenic bacteria causing the chronic prostatitis is 14.9 ± 7.2 , significantly higher than the average of the total subjects, 11.2 ± 7.3 ($p < 0.01$) and numbers of subjects in the mild, moderate and severe groups are 10 (14.2%), 43 (61.4%) and 17 (24.2%), respectively, meaning that the moderate and the severe groups show high portion. The correlation between the total NIH-CPSI points of the pain, urination and quality of life and the IPSS points shows positive correlation of the Pearson coefficients, 0.332, 0.766, 0.691 and 0.717, respectively. The relation is analyzed with the regression analysis based on the assumption that each and total NIH-CPSI points affect the total IPSS point. The result shows that the higher pain, urination, quality of life and total NIH-CPSI points tends to increase the IPSS point (pain $t = 5.47$, $p < 0.01$, urination $t = 8.94$, $p < 0.01$, quality of life $t = 2.37$, $p = 0.01$, total $t = 2.56$, $p = 0.01$).

Interpretation of results

The NIH-CPSI and the IPSS points show positive correlation for the males in their 40s and 50s under the medical checkup and the tendency shows that the higher NIH-CPSI point means the higher IPSS point.

Concluding message

The NIH-CPSI and the IPSS points show positive correlation for the males in their 40s and 50s under the medical checkup and the tendency shows that the higher NIH-CPSI point means the higher IPSS point. In particular, increasing the NIH-CPSI point means to increase the IPSS point. Therefore, it may be possible to increase the urination with increase pains among the chronic prostatitis patients and this shall be considered during the treatment.

Disclosures

Funding: none **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** retrospective study **Helsinki:** Yes **Informed Consent:** Yes