

Discrepancies in Perception of Urinary Incontinence between Patient and Physician after Robotic Radical Prostatectomy

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Purpose: Reported incidence of urinary incontinence after a radical prostatectomy (RP) varies between studies. This may be due not only to the definition of incontinence applied, but also how the information is acquired. We investigated the differences in perception of post robot-assisted laparoscopic RP (RALP) urinary incontinence acquired through doctor interviews and patient-reported questionnaires. **Materials and Methods:** Of 238 consecutive men who underwent RALP by a single surgeon between July 2005 and February 2008, we evaluated 66 men using the International Consultation on Incontinence Questionnaire (ICIQ) at various time points after surgery. Each patient's ICIQ results were considered to be the patient's perceptions of urinary incontinence. The physician at the same time directly interviewed the patients about the number of pads used and considered complete continence to be equivalent to the use of no pads or safety liners. **Results:** Of the 66 patients, the physician reported that 34 (51.5%) had obtained complete continence. However, analysis of the questionnaires of these 34 patients revealed that only 5 (14.7%) patients reported that they never leaked during the past 4 weeks. Most patients (11 patients, 32.4%) who did not use any pad did in fact reported leakage of a small or moderate amount of urine about once a day. **Conclusion:** Our results indicate that there are discrepancies in the perception of urinary incontinence between doctor and patient after RALP. Non-use of pads is not equivalent to obtaining complete urinary continence. Therefore, the number of pads used is not a good measure to determine the status of complete urinary continence.

Key Words: Radical prostatectomy, urinary incontinence, questionnaire

INTRODUCTION

Urinary incontinence is one of the most important factors that can affect a patient's quality of life after radical prostatectomy (RP). Continence rates following open RP, laparoscopic RP, and robot-assisted laparoscopic RP (RALP) have recently been reported to range from 84.9 to 98%.¹⁻⁴ The reported incidence of urinary incontinence varies widely, and this may be due both to different definition of continence applied, and how this information is acquired. In addition,

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the incidence can vary depending on how much time has passed since RP.

Lack of pad use is usually defined as being continent. A more generous definition also considers users of 1 pad per day to be continent.⁵ Various other measures including questionnaires have also been used to define continence after RP. However, reported urinary incontinence rates in patients who underwent RP for prostate cancer, based on various definitions, do not necessarily correspond with one another, even in the same patient.⁶

Several methods can be used to obtain information from patients regarding continence. Among these, physician interviews and patient-reported questionnaires are widely used. Physician interviews are easy to perform at an outpatient clinic, but the results are relatively subjective and can reflect physician bias. Surgeons may consider incontinence to be less serious than patients do. Although patient-reported questionnaires are highly dependent on patient compliance, they are relatively objective and often reflect the patient perspective. We evaluated whether discrepancies in perception exist regarding the prevalence and severity of urinary incontinence after RALP between a surgeon and his patients.

MATERIALS AND METHODS

Between July 2005 and February 2008, 238 consecutive men who underwent RALP for localized prostate cancer (T2-T3N0M0) performed by a single surgeon were enrolled in this study. The patients were followed either every month or every two months after RALP. At various time points from 1 to 14 months after RALP the interviewing surgeon asked about the number of pads used. After the interview, the patients separately completed the International Consultation on Incontinence Questionnaire-Short Form (ICIQ-SF).⁷ Patients who met the interviewing doctor and completed the questionnaire on the same day were eligible for inclusion. Continence was defined by the doctor as not using either pad or safety liner.

The ICIQ-SF, which comprises three questions, assesses urinary incontinence and its impact on quality of life by asking how often and how much the patient leaks urine and how much this has bothered them on average over the past 4 weeks.⁷ Question 1 asked, "How often do you leak urine?" Subjects were instructed to select among "none" (0), "about once a week or less often" (1), "2 or 3 times a week" (2), "about once a day" (3), "several times a day" (4), and "all the time" (5). Question 2 asked, "How much urine do you usually leak (whether you wear protection or not)?" Patients responded with "none" (0), "a small amount" (2), "a moderate amount" (4) or "a large amount"

(6). Question 3 asked, "Overall, how much does leaking urine interfere with your everyday life?" Participants chose a number from 0 (not at all) to 10 (a great deal). The degree of urinary incontinence was defined as the sum of scores for questions 1 and 2 of the ICIQ-SF. Complete continence from the patient's perspective was defined as responding with "0" to questions 1 and 2 of the ICIQ-SF.

Demographic and clinical characteristics such as age, body mass index (BMI, kg/m²), initial PSA, prostate volume of prostatectomy specimen, Gleason score, and pathological status were investigated. We evaluated the differences in continence rates estimated based on the number of pads used versus the summed score for the ICIQ-SF questions. To evaluate the relationship between the frequency and amount of urinary incontinence, the correlation between the score for question 1 and that for question 2 of the ICIQ-SF was investigated. To evaluate the relationship between the degree of urinary incontinence and quality of life, the correlation between the score for question 3 and the sum of scores for questions 1 and 2 was also investigated. The number of patients who used a pad or not was compared to the score for each question of the ICIQ-SF.

Pearson's correlations were used to determine the significance of the relationships among ICIQ scores. SPSS 12.0 (SPSS Inc., Chicago, IL, USA) was used for statistical analyses. Data are presented as means and standard deviations. $p < 0.05$ was considered statistically significant.

RESULTS

A total of 66 patients who met the inclusion criteria were evaluated. The mean age, BMI, initial PSA, and prostate volume of the prostatectomy specimen of these 66 patients was 65 years (range, 46-80 years), 24.5 ± 2.6 kg/m² (range, 19-31 kg/m²), 20.3 ± 31.7 ng/mL (range, 3.3-141.0 ng/mL), and 29.9 ± 11.9 cc (range, 13.0-92.0 cc), respectively. The Gleason score for the prostatectomy specimens was 6 or less in 19 (28.8%) patients, 7 in 32 (48.5%), and 8 or greater in 15 (22.7%) patients. The pathological T stage was T2a in 16 (24.2%), T2b in 24 (36.4%), T3a in 6 (9.1%), T3b in 9 (13.6%), and T3c in 11 (16.7%) patients. The follow-up period varied from 1 to 14 months. Most patients (20 of 66 patients, 30.3%) were surveyed 2 months after RALP.

The score for question 1 of the ICIQ correlated positively with the score for question 2 of the ICIQ ($r = 0.636$, $p = 0.001$) (Fig. 1A). Among 66 patients, most patients (17, 25.8%) scored 4 for question 1 and scored 2 for question 2. Thirteen patients (19.7%) who scored 3 for question 1 chose 2 for question 2. The other 13 patients

(19.7%) who scored 4 for question 1 also answered 4 for question 2. The sum of scores for questions 1 and 2 also correlated positively with the score for question 3 ($r = 0.704, p = 0.001$) (Fig. 1B).

The sum of scores for questions 1 and 2 positively correlated with the number of pads used per day ($r = 0.427, p = 0.001$) (Fig. 2A). Thirty-four of the 66 patients reported to the interviewing doctor that they did not use any safety liners or pads. However, only 5 (14.7%) of these 34 patients reported that they never leaked during the past 4 weeks (Fig. 2B). Among the 34 patients who reported not using pads, the sum of scores for questions 1 and 2 (total 11) was 5 in 11 patients and 6 in 7 patients.

Evaluation of the number of pad used according to the score for each question of the ICIQ-SF revealed that some patients did not use a pad even though they had a high

ICIQ-SF score (Fig. 3).

DISCUSSION

To assess urinary incontinence after RALP, urologists usually interview patients or ask them to fill out self-reported questionnaires. However, filling out a questionnaire can be troublesome and many doctors tend to use interview results only to assess the state of continence in these patients. The number of pads used per day obtained during the interview is used by most physicians to evaluate the degree of urinary incontinence; not using a pad is often used to define continence. However, not using a pad may not necessarily mean that there is no urine leakage. Some patients are reluctant to use a pad when they perceive uri-

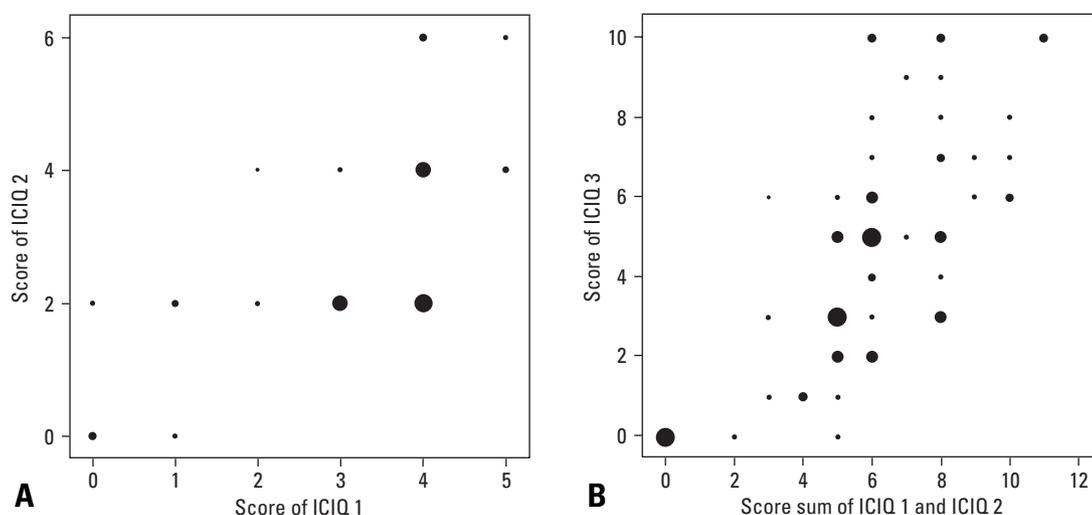


Fig. 1. (A) Correlation between the scores for questions 1 and 2 of the ICIQ ($r = 0.636, p = 0.001$). (B) Correlation between scores for question 3 and the sum of questions 1 and 2 of the ICIQ ($r = 0.704, p = 0.001$). ICIQ, International Consultation on Incontinence Questionnaire.

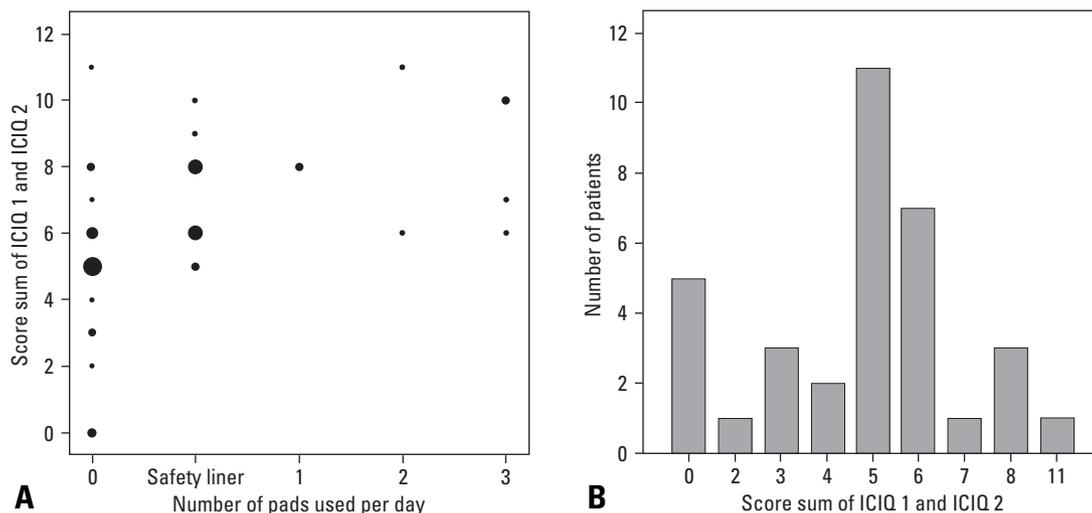


Fig. 2. (A) Correlation between the number of pads used per day and the sum of scores for questions 1 and 2 of the ICIQ ($r = 0.427, p = 0.001$). (B) Distribution of the number of patients according to the sum of scores for questions 1 and 2 of the ICIQ. ICIQ, International Consultation on Incontinence Questionnaire.

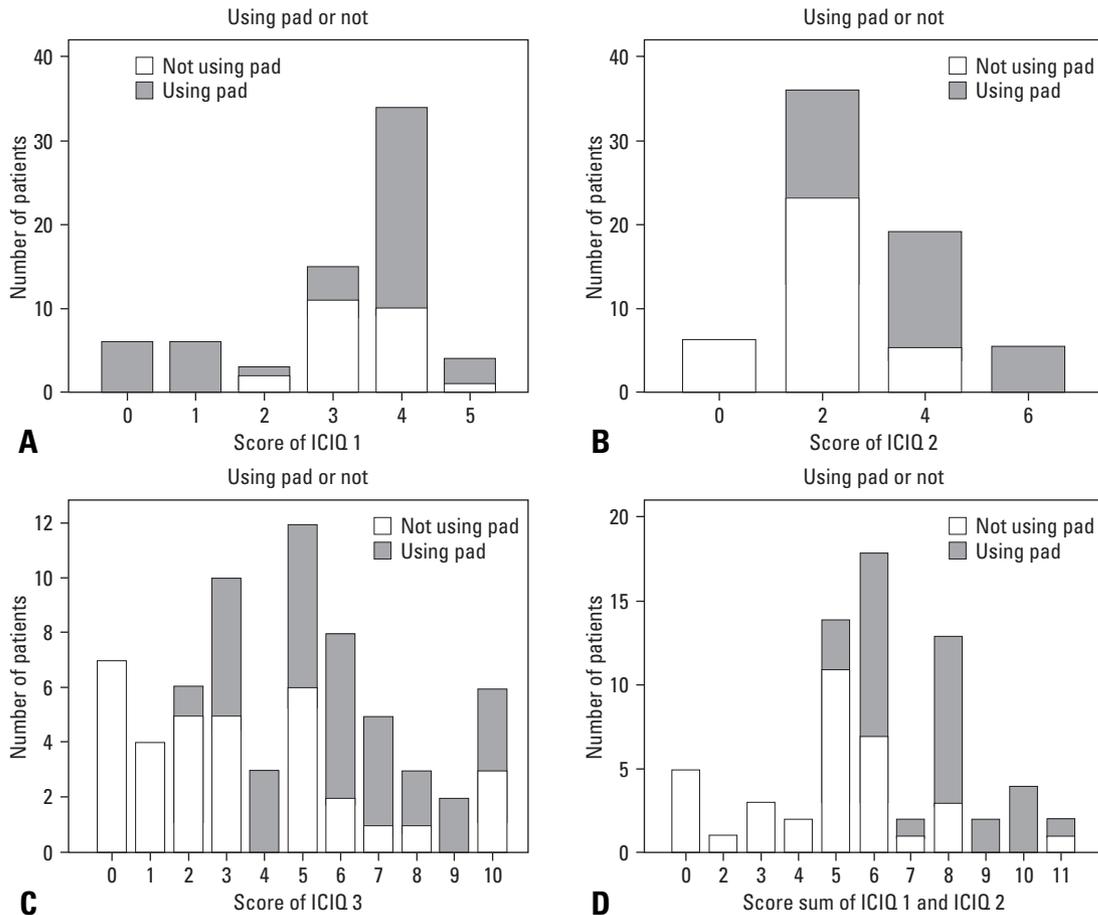


Fig. 3. (A) Distribution of the number of patients according to pad use and question 1 of the ICIQ. (B) Distribution of the number of patients according to pad use and question 2 of the ICIQ. (C) Distribution of the number of patients according to pad use and question 3 of the ICIQ. (D) Distribution of the number of patients according to pad use and the sum of scores for questions 1 and 2 of the ICIQ. ICIQ, International Consultation on Incontinence Questionnaire.

nary incontinence to be slight. Nevertheless, many doctors equate not using a pad with full continence. To address this problem, various questionnaires have been designed. Unsurprisingly, patients show higher subjective distress when filling out questionnaires than when answering questions in structured interviews.⁸

The Cancer of the Prostate Strategic Urological Research Endeavor (CaPSURE) study, a longitudinal, observational database of patients with biopsy-proven prostate cancer, has been conducted since 1995. Using CaPSURE data, Litwin, et al.⁹ evaluated the differences between urologist and patient assessments of the health-related quality of life in men with prostate cancer. They found that physician ratings of patient symptoms did not correlate well with patient self-assessments of health-related quality of life. The difference in reported urinary incontinence was more than 70%.

In this study, only 5 of 34 patients who were considered to be continent by the doctor also considered themselves to be continent. This is a much larger discrepancy in perception of urinary continence between the doctor and patient than we initially expected. Among 34 patients who did not

use a pad, the sum of scores for questions 1 and 2 was 5 or 6 in most patients (Fig. 2). Eleven (32.4%) patients had a summed score of 5 with scores for questions 1 (score of 3) and 2 (score of 2), indicating that they leaked a small amount of urine about once a day. Seven (20.6%) patients had a summed score of 6 based on scores for question 1 (score of 4) and 2 (score of 2), indicating that they leaked a small amount of urine several times a day. This result demonstrates that even if a patient leaks urine several times a day, he may resist using a pad if he considers the amount of urine leaked to be small. A similar result was found in 24 patients who reported using a safety liner. Nine (37.5%) of these patients had a sum score of 6 with 8 patients scoring 4 and 2 for questions 1 and 2, respectively. This indicates that except for one patient, small amount of urine leaked several times a day. Thus, the amount of urine leaked rather than the frequency of leakage appears to determine whether the patient uses a pad or not.

To objectively evaluate the amount of incontinence, a pad weight gain test conducted over a 24-hour period can be helpful.¹⁰ Subjective assessments of urinary inconti-

nence by patient interview can be different from the objective findings of a 24-hour pad test.¹¹ In our study, however, we used the ICIQ-SF instead of the 24-hour pad test, since a good correlation was reported between the 24-hour pad test results and ICIQ scores in women with primary urinary stress incontinence.¹²

Several questionnaires other than ICIQ have been developed to measure urinary incontinence after RP, such as the King's Health Questionnaire (KHQ), the Incontinence Quality of Life Questionnaire (I-QOL), and The Incontinence Impact Questionnaire (IIQ).¹³ Unlike these other questionnaires, however, ICIQ is simple and easily available. The scoring system used in this questionnaire is very simple. ICIQ can measure not only the impact of urinary incontinence on daily life, but also the frequency and amount of urinary incontinence.^{14,15} Thus, many clinicians prefer to use the ICIQ in daily practice. In this study, we confirmed that the ICIQ-SF is useful in evaluating urinary incontinence after RALP. The response to question 1 correlated positively with the response to question 2 ($r = 0.636$, $p = 0.001$) (Fig. 1A), which demonstrates that the more frequently a patient leaks, the more the amount of leakage. The sum of scores for questions 1 and 2 also correlated positively with the score for question 3 ($r = 0.704$, $p = 0.001$) (Fig. 1B), which demonstrates that quality of life deteriorates as the frequency and amount of urine leakage increase.

One of the factors related to the continence rate is time from operation. In this study, the interview and questionnaire were conducted at various time points after RALP. Continence rate was not investigated in this study because the duration after the operation varied between patients. We focused on the discrepancy in perceived continence between the doctor and his patients.

Our present results indicate a large discrepancy in the perception of urinary incontinence between surgeon and patient. The number of pads used does not appear to be an accurate measure of urinary continence. Self-reported patient questionnaire may be useful in evaluating the patients' perception on their urinary incontinence status.

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