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# Health Related Quality of Life after Urinary Diversion: Comparison between continent and incontinent urinary diversion.

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## Abstract

**Objective:** Compare quality of life (QOL) in Patients with continent and incontinent urinary diversion. After radical cystectomy or non-used native bladder from any disease.

**Method:** Sixty patients who had urinary diversion were interviewed by Physicians. Using SF-36 and FACT-G for assess quality of life in the patient who had operated at least one year in our institution.

**Result:** Four categories (physical, social/familial, emotional and functional well-being) in FACT-G were equally favorable in these groups. Two categories (physical and mental) in SF-36 had no any differrent quality of life in both group of urinary diversions.

**Conclusion:** No significant difference in QOL between incontinent and continent urinary diversion after surgery at least one years. The patients can adapt their life style for selected type of urinary diversion. The type of urinary diversion can depend on the indications, condition of the patient and experience of surgeons.

**Keyword:** radical cystectomy, urinary diversion

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## Introduction

The patients who had lost their bladder because some disease such as bladder cancer or chronic bladder inflammation needed to change normal urinary tract to urinary diversion. In recent, two major type of urinary diversions are commonly used. First is Incontinent urinary diversion (IUD) and second is continent catherizing pouch or continent urinary diversion (CUD). Once they undergo urinary reconstruction for any type of urinary diversion, they also have specific problems related to the surgery. For IUD, the patients need to learn how to care the urinary stoma which opened at their abdominal wall and how to collected urine by external urinary reservoir but in CUD, the patient needed to know how to empty the urine by abdominal strain or self catherization.

In previous study, it show continent urinary diversion patients have quality of life (QOL) better then incontinent urinary diversion[1]. But patients in Northern of Thailand, have different in culture, education and socioeconomic pattern. Quality of life between incontinent urinary diversion and continent urinary diversion is questionable, so use Randon SF36 version 2 and FACT__G questionnaires for evaluation of difference.

## Patient and method

We recruited the patients who had undergone urinary diversion for at least one year in our institute. They were categoried two group. The first is the group of patient with IUD such as ileal conduit. Another is CUD. Each patient was informed consent form. They were assessed by SF36 version 2.0 and FACT__G after translated to Thai language. The patients who have disease progression or complication were exclusion from study.

Clinical parameters, including age, gender, type of diversion and years after surgery. Chi-square test for categorical variables. A P value less than 0.05 was considered to indicate statistical significant. The variable were computed by SPSS version 15.0

## Result

All eligible patients were classified into two groups (30 patients in each group). The characteristic of patients in both groups had no statistic significant different except the age (Table 1), the IUD group was older than the CUD group.(Mean 59.93 vs 55.70, p=.01) and years after surgery, The IUD were shortly time than COD (2.5 VS 3.2 years p=.05). The Summery scores of SF36 is higher in IOD but not statistic significantly and the FACT__G score is equally both.

**Table 1** *Characteristic of entry patients*

| | | IUD | CUD | P - value |
|---|---|---|---|---|
| Gender | Male | 19 (63.3%) | 14 (46.7%) | 0.194 |
| | Female | 11 (36.7%) | 16 (53.3%) | |
| Age (Year) | | 59.93±6.81 | 55.70±5.70 | 0.012* |
| N | | 30 | 30 | |
| Years after surgery | | 2.5(1.43) | 3.2(1.52) | 0.050* |

P=0.05

**Table 2** *Summary score*

| Questionares | IUD (SD) | CUD (SD) | P - value |
|---|---|---|---|
| SF36 | 81.02 (±23.76) | 77.43 (±25.50) | 0.574 |
| FACT__G | 78.66 (±10.81) | 78.63 (±11.66) | 0.991 |

P=0.05

**Table 3** *FACT__G*

| | IUD (SD) | CUD (SD) | P - value |
|---|---|---|---|
| physical well-being | 19.9 (5.16) | 20.30 (5.38) | 0.77 |
| social/family well-being | 20.03 (2.52) | 19.36 (2.96) | 0.35 |
| emotional well-being | 18.36 (4.07) | 18.3 (4.22) | 0.97 |
| functional well-being | 19.16 (3.51) | 18.3 (4.02) | 0.41 |

**Table 4** *SF36*

| | IUD (SD) | CUD (SD) | P - value |
|---|---|---|---|
| Physical | 44.7±14.08 | 42.13±14.62 | 0.48 |
| Mental | 46.1±13.09 | 44.63±14.55 | 0.67 |

There were no statistically significant difference of the total score of SF-36 and FACT__G (Table 2)

We analysed in FACT__G questionnaire in physical well-being; social/family well-being; emotional well-being; functional well-being and it showed no different in both groups. (Table 3)

## Discussion

In previous study, Hardts et al[1] use RAND-36 item health survey (SF36) in prospective study. The patient who underwent radical cystectomy and urinary diversion was assessed pre-surgery and 1 year post -surgery. The study show quality of life is better than in continent group.

The factors interface quality of life have a lot of categories such as age, gender, education, culture communication between physichian and patient etc. In developing country, there had limited of educations and socioeconomic problems. In some patient who have opportunity to choose type of urinary diversion, they should have informations enough to make decision that will change their life style. In another way, the continent urinary diversion make more time than incontinent surgery. In elderly patient, when they go on major operation, they have risk for surgery and quality of life is equivocally. Our study show the

incontinent group were older than continent group significantly (59.93 vs 55.70, p=0.05). In other study, their support neobladder and ileal conduit are not significantly different in QOL.

## Conclusion

The patient who underwent urinary diversion has the same quality of life between incontinent and continent at one year after surgery.

## References

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