

Considerations on the psychological status of the patients undergoing radical cystectomy

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Abstract

The psychological impact on patients suffering radical cystectomy is twofold - (both that of the underlying neoplastic disease and that measured by the quality of life subsequent to surgery) and increases as the urinary derivation technique is less physiological and affects more the local anatomy.

Although there are numerous questionnaires that assess the quality of life of patients with cancer (HRQoL - health related QoL), not many probe bladder cancer morbidity or correlate the different types of urinary diversions' impact on QoL (quality of life).

We analyzed 39 cases in our clinic who underwent radical cystectomy between August 2013 and August 2014. Different diversions were performed, as follows: for 24 patients a cutaneous ureterostomy was performed, in 10 cases a Mainz II pouch, in 3 cases a Bricker derivation and in 2 patients a Studer neobladder was performed. In these patients, QoL - Cancer Version and FACT-BL questionnaires were administered and were followed for an initial period of 2 years. According to our survey, the Bricker derivation is best tolerated, followed by neobladder and the Mainz II pouch.

Introduction

Cancer patients are a special category because of the psychological pressure exerted by the neoplastic disease. The psychological impact on patients suffering radical cystectomy is twofold - (both that of the underlying neoplastic disease and that measured by the quality of life subsequent to surgery) and increases as the urinary derivation technique is less physiological and affects more the local anatomy. This is why, over time, multiple surgical techniques to restore the continuity of the urinary tract have been imagined, using stomach, colon, small intestine, so that the patient's life would change as little as possible (1- 3).

Currently, there are two types of urinary derivations:

- Abdominal continent/non-continent urinary diversions (ureterostomy, ileal conduit, sigmo-rectal pouches, etc.) and
- 2.Orthotopic urinary diversions: neobladders, orthotopic continent reservoirs, derived from the digestive tract with a urethral anastomosis.

The gold-standard in terms of urinary diversion is the orthotopic neobladder, for patients without contraindication (without significant comorbidities, without urethral involvement, without lymph node involvement (N2, N3), with a good life-expectancy). This does not change the patient's appearance and modifies the least the urinary tract function (4).

An initial psychological impact is represented by the loss or modification of micturition. The impact is greater in the case of cutaneous diversions, after which the patient becomes the bearer of an external urine collecting appliance, completely altering their lifestyle. These patients should be trained in stoma care and be informed about complications deriving from its presence (5).

The second is the aesthetic impact. Patients will avoid publicly exposing their stoma and try, if possible, to hide its presence. Hence, reluctance to use public toilets, for example. Patients with urethral

diversions or colon low-pressure pouches (type II Mainz) will not encounter such problems, so that the aesthetic impact is greatly reduced. Patients who undergo radical cystectomy will suffer from erectile dysfunction in up to 87% of cases (6, 7).

Materials and Methods

We analyzed 39 cases in our clinic who underwent radical cystectomy between August 2013 and August 2014. Different diversions were performed, as follows: for 24 patients a cutaneous ureterostomy was performed, in 10 cases a Mainz II pouch, in 3 cases a Bricker derivation and in 2 patients a Studer neobladder was performed. In these patients, QoL - Cancer Version and FACT-BL questionnaires were administered and were followed for an initial period of 2 years.

Results

The most common complications in the case of ureterostomy were stenosis at the site of the stoma, hydro nephrosis, recurrent urinary tract infections, peristomal dermatitis. Patients with the Mainz II sigma-rectum pouch had increased risk of hyperchloraemic metabolic acidosis, infections of the upper urinary tract, sigmoid cancer. In addition, they are patients showing "chronic diarrhea".

The use of small bowel for urinary diversions is also not free of complications, whether the Bricker technique is used, or the Studer neobladder. These are represented by prolonged postoperative ileus, stoma stenosis and irritation of the skin around the stoma, acute pyelonephritis and ileal adenocarcinoma for the Bricker derivation and urinary incontinence, nocturnal enuresis, ureteral reflux, stenosis of the uretero-neobladder anastomosis, neobladder rupture, adenocarcinoma of the neobladder for the Studer neobladder.

According to the questionnaires the QoL was least affected in patients who underwent an ileal conduit. The patients with orthotopic neobladder had also a good QoL, but our clinic's experience with this diversion is still reduced.

All of these complications have, of course, a negative effect on the patient's psychological status. These need to be explained in detail to the patient preoperatively and he/she has to have enough time to think about them, to consult his family. We all want, as physicians and surgeons, our patients to have a simple evolution. However, complications are inevitable and should be treated accordingly; they must also be explained to the patient, thus reducing the psychological impact and making the patient much more compliant.

Discussion

Although there are numerous questionnaires that assess the quality of life of patients with cancer (HRQoL - health related QoL), not many probe bladder cancer morbidity or correlate the different types of urinary diversions' impact on QoL (quality of life).

A 2013 prospective study (Asgari M.A.) comparatively assesses QoL for the 3 main types of urinary diversion (Bricker diversion, Mainz II sigma-rectum pouch and the orthotopic ileal neobladder). According to this study patient satisfaction was higher for patients with neobladder and Mainz II than for those with type Bricker (4).

Joe Phillip and co., in a 2009 article, assessed 57 patients with a median age of 70 years, that underwent radical cystectomy with either orthotopic substitution (OBS) (28 patients) or a ileal conduit diversion (ICD) (24 patients). They found no significant difference in the quality of life in the two subgroups but they found issues with patients body image in those with ICD. Patients with OBS had a more active life-style and had achieved continence (5).

In an article from 2002, Dutta and co, administered 2 questionnaires – SF-36 and FACT-G - to 72 patients that underwent radical cystectomy with either neobladder, or ileal conduit. They found only marginal QoL advantages of the neobladder over the ileal conduit (6).

The question that we find in many questionnaires and that assesses patient global satisfaction: "If you had to spend the rest of your life with your current symptoms, how would you feel?" is a strong question that has a strong impact. It encourages the patient to a strong introspection and requires a high degree of sincerity and awareness on his part. The patient should make an informed decision about the type of urinary diversion and that should be consistent with its expectations. The urologists should inform the patient who is a candidate for radical cystectomy about the advantages and disadvantages of each type of urinary diversion; about the possibility that intra operative factors might prevent the surgeon from constructing the neobladder. One way to familiarize the patient with his future condition is to connect him/her with patients who had previously underwent radical cystectomy and who have different types of urinary diversions. The patient can ask the colleagues questions and can get advice from them, so his/her decision is as informed as possible.

Conclusions

In conclusion, patients who undergo radical cystectomy, independent of the type of urinary derivation used, must also undergo preoperative and postoperative psychological counseling. They must be assessed by a multidisciplinary team, comprised by the urologist, oncologist and a psychologist specialized in these kind of patients. The quality of life of these patients is affected, and, according to our survey, the Bricker derivation is best tolerated, followed by neobladder and the Mainz II pouch. The follow-up period for the patients was, however, quite short and it is likely that longer follow up of patients will be able to extract further information.

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