

CORRESPONDENCE

Sexual Impairment and its Effects on Quality of Life in Patients With Rectal Cancer

by Prof. Dr. med. Christian Schmidt, Dr. med. Anna Daun, MA Björn Malchow, Prof. Dr. phil. Thomas Küchler in volume 8/2010

Substantial Deficiencies

The article has some serious methodological flaws. Preoperative data about quality of life and sexuality are lacking in 72.9% of patients, and for the 2 year observation period after surgery, data are available for merely 18% of subjects. This seriously limits the evidence of the study, which can be classified neither as a prospective nor as a retrospective study.

The questionnaires do not do justice to impaired sexual functioning in both sexes. The Female Sexual Function Index (FSI) and the international Index of Erectile Function (IIEF) would have provided more adequate tools. Impaired innervation in women can be diagnosed on the basis of vaginal sensitivity, temperature perception, vibratory sensation, ability to experience vaginal orgasm, and lubrication (1).

Erectile dysfunction in men that has been persistently present for more than 2 years is a known problem and should be mentioned preoperatively. An early solution to the problem as well as advice are required. The authors' assumption, that adjuvant radiotherapy does not affect ED, cannot be answered methodologically because observation periods of more than 2 years are required to assess the situation (2).

However, the assessment of bladder voiding disorder that is commonly associated with FSD by means of postoperative measurements of residual urine and micturition protocol is clinically justified (3).

We evaluated 58 men with rectal carcinoma while investigating a similar clinical question. The patients were treated according to their tumor stage with deep anterior rectal and mesorectal resection (AR) or abdominoperineal extirpation of the rectum (APR) by using the water jet short needle knife (flush knife) technique. The mean period of aftercare was 35 months. The effect on sexuality and bladder voiding function was evaluated by using validated questionnaires (International Prostate Symptom Score [IPSS], [IIEF-5]).

Impaired bladder voiding function necessitating therapy was not observed when the flush knife technique was used, independently of the surgical approach. ED requiring treatment occurred in 9 of 58 patients (15%) postoperatively. Using the flush knife technique in the context of rectal surgery enables neuroprotection of structures relevant to patients' sexuality, in addition to incurring a lower degree of blood loss.

DOI: 10.3238/arztebl.2010.0573a

REFERENCES

1. Otto T, Bornemeyer K, Bagner J W, El-Baz A G, Wishahi M, Otto W: Operative treatment of female urinary incontinence with particular considerations of sexuality according to anatomical findings. *Akt Urol* 2007; 38: 33–7.
2. Frumovitz M, et al.: Quality of life and sexual functioning in cervical cancer survivors. *J Clin Oncol* 2005; 23: 7428–36.
3. Junginger T, Kneist W, Borschitz T: Totale Mesorektumexzision kann urogenitale Dysfunktionen vermeiden. *Dtsch Arztebl* 2004; 101(46): A 3106–3110.
4. Schmidt C, Daun A, Malchow B, Küchler T: Sexual impairment and its effects on quality of life in patients with rectal cancer [Einschränkungen der Sexualität und ihr Einfluss auf die Lebensqualität bei Patienten mit Rektumkarzinom]. *Dtsch Arztebl Int* 2010; 107(8): 123–30.

Prof. Dr. med. Peter Goretzki, Dr. med. Bernhard Lammers, Dr. med. Aristotelis Touloumtzidis

Prof. Dr. med. Thomas Otto
Urologische Klinik
Städtische Kliniken Neuss
Lukaskrankenhaus GmbH
Preußenstr. 84
41464 Neuss, Germany
thomas_otto@lukasneuss.de

More Factors Should Have Been Considered

The authors are to be thanked for dealing with this important topic, for having conducted their study in such a large cohort of patients, and for publishing the results.

In analyzing how multimodal therapies affect the quality of life of patients with rectal cancers, further factors should be investigated in addition to age and sex, so as to obtain as complete a picture as is possible of the harm patterns and their mechanisms. The authors reported that 48% of the 368 patients had received adjuvant radiotherapy. In addition to surgery related morbidity, irradiation of the pelvis can lead to significantly deteriorated anal sphincter function (1) and sexual function (2). In male patients, the testes are affected by scattered radiation, which in turn may harm the Leydig cells and result in chronically subnormal testosterone concentrations (3). This should be borne in mind when investigating or treating posttherapeutic fatigue. Consequently, (neo)adjuvant therapeutic modalities should be described as comprehensively as possible in such studies.

DOI: 10.3238/arztebl.2010.0573b

REFERENCES

1. Peeters KC, van de Velde CJ, Leer JW: Late side effects of short-course preoperative radiotherapy combined with total mesorectal excision for rectal cancer: increased bowel dysfunction in irradiated patients—a Dutch colorectal cancer group study. *J Clin Oncol* 2005; 23: 6199–206.
2. Marijnen CA, van de Velde C, Putter H, et al.: Impact of short-term preoperative radiotherapy on health-related quality of life and sexual functioning in primary rectal cancer: Report of a multicenter randomized trial. *J Clin Oncol* 2005; 23(9): 1847–58.

3. Hermann RM, Henkel K, Christiansen H, et al.: Testicular dose and hormonal changes after radiotherapy of rectal cancer. *Radiother Oncol* 2005; 75: 83–8.
4. Schmidt C, Daun A, Malchow B, Küchler T: Sexual impairment and its effects on quality of life in patients with rectal cancer [Einschränkungen der Sexualität und ihr Einfluss auf die Lebensqualität bei Patienten mit Rektumkarzinom]. *Dtsch Arztebl Int* 2010; 107(8): 123–30.

PD Dr. med. Robert M. Hermann
 Zentrum für Strahlentherapie und Radioonkologie
 Ärztehaus an der Ammerlandklinik
 Mozartstr. 30
 26655 Westerstede, Germany
 ro.hermann@t-online.de

In Reply:

We thank our colleagues for their critical interest in our article, “Sexual impairment and its effects on quality of life in patients with rectal cancer.”

We wish to respond individually to the criticisms expressed by Professor Otto et al and Dr Herrmann.

Of course, any clinical study that includes large numbers of patients (a total of 519 in our study) encounters the same problem – namely, that not all parameters can be controlled. However, we believe that following up patients’ quality of life over 2 years yields more representative results than a more detailed evaluation by means of interviews with very few patients at a particular point in time. Let’s go into this in some more detail.

Firstly, as we mentioned in our original article, our guiding principle in this study was the idea that our patients should be put under as little strain and stress as possible. The relevant considerations led us to unequivocally decide against using the International Prostate Symptom Score (IPSS) or other sex specific indices. We therefore added to the validated quality of life questionnaire only those questions relating to sexuality that had been found in several preliminary

studies to be reliable and, above all, acceptable for patients.

Secondly, we believe that any comments about sexual impairment after rectal surgery can only be interpreted in the context of patients’ overall quality of life and on an age-specific basis and have presented our results accordingly.

Also, we agree with Professor Otto and Dr Herrmann that longer observation periods would have been required in order to draw any definite conclusions about the (adverse) effects of radiotherapy, and that further important variables would have merited investigation. At the same time, our study covered the longest observation period that we were able to identify in the German language literature with regard to the overall topic of quality of life in patients with rectal cancer.

DOI: 10.3238/arztebl.2010.0574

REFERENCES

1. Schmidt C, Daun A, Malchow B, Küchler T: Sexual impairment and its effects on quality of life in patients with rectal cancer [Einschränkungen der Sexualität und ihr Einfluss auf die Lebensqualität bei Patienten mit Rektumkarzinom]. *Dtsch Arztebl Int* 2010; 107(8): 123–30.

Prof. Dr. med. Christian Schmidt MPH
 Medizinischer Geschäftsführer
 Kliniken der Stadt Köln gGmbH
 Neufelder Str. 34
 51067 Köln, Germany
 schmidtc@kliniken-koeln.de

Prof. Dr. phil. Thomas Küchler
 Referenzzentrum Lebensqualität in der
 Onkologie am Krebszentrum Nord
 Universitätsklinik Schleswig-Holstein
 Arnold-Heller-Str. 5
 24105 Kiel, Germany

Conflict of interest statement

The authors of all contributions declare that no conflict of interest exists according to the guidelines of the International Committee of Medical Journal Editors.