

bladder preserving strategies, however, only under strict protocols and only in large centers with good interdisciplinary cooperation.

Dr. Arnulf Stenzl
*Professor and Chairman of Urology
Eberhard-Karls-University Tuebingen
Tuebingen, Germany*

UROLOGICAL ONCOLOGY

Practical considerations in permanent brachytherapy for localized adenocarcinoma of the prostate

Stone NN, Stock RG

Department of Urology, Mount Sinai School of Medicine, 1 Gustave Levy Place, New York, NY 10029,
USA

Urol Clin N Am; 2003; 30: 351-62

Prostate brachytherapy has become an accepted treatment modality for localized prostate cancer. Long-term biochemical and biopsy data confirm the early positive impressions that brachytherapy is as valid a treatment option as radical prostatectomy or EBRT. Quality-of-life data also look promising, but more follow-up data are needed. Is brachytherapy as good as or perhaps better than radical prostatectomy? This question cannot be answered yet. Well-controlled, randomized studies are needed. In the meantime, the clinician will have to rely on the available published data.

Permanent interstitial brachytherapy for the management of carcinoma of the prostate gland

Merrick GS, Wallner KE, Butler WM

Schiffler Cancer Center, Wheeling Hospital, Wheeling, West Virginia, USA

J Urol. 2003; 169: 1643-1652

Purpose: We summarize the permanent prostate brachytherapy literature, including biochemical outcomes, quality of life parameters and areas of controversy.

Materials and Methods: The permanent prostate brachytherapy literature was reviewed using Medline searches to ensure completeness.

Results: Using various planning and intraoperative techniques the majority of the brachytherapy literature demonstrates durable biochemical outcomes for patients with low, intermediate and high risk features. For low risk patients there is no advantage to combining supplemental external beam radiation therapy with brachytherapy. In addition, supplemental external beam radiation therapy may not improve biochemical outcomes for patients at intermediate and high risk if the target volume consists of the prostate with a generous periprostatic margin. There is no defined role for adjuvant hormonal manipulation. Although a reliable set of pretreatment criteria to predict implant related morbidity is not available, severe urinary and rectal morbidity is rare. The incidence of brachytherapy induced erectile dysfunction is significantly greater than initially reported but the majority of patients respond favorably to sildenafil.

Conclusions: Continued refinements in brachytherapy planning and implementation techniques, postimplantation evaluation and continued elucidation of the etiology of urinary, bowel and sexual dysfunction should result in further improvements in biochemical and quality of life outcomes.

Editorial Comment

These two papers essentially cover all available knowledge on the clinical application on permanent interstitial seed brachytherapy for prostate cancer.

Next to radical prostatectomy, permanent interstitial prostate (low-dose-rate, LDR) brachytherapy has become an accepted modality for treating localized prostate cancer. These papers are very thorough and up-to-date overviews on the history, the technical aspects, the treatment results and side effects of this new therapeutic option. Based on previous ultrasound inventions in Europe, the technique was refined basically in the US and realized on biplanar linear array ultrasound probes. This tool, together with an expert technique, forms the basis of a successful brachytherapy. Furthermore, software advances for the preplanning and the procedure resulted in new programs that now can accurately monitor each seeds position and radiation contribution.

Patient selection is crucial for successful therapy and the ideal candidate has low risk prostate cancer, defined as PSA of 10 or less, Gleason score of 6 or less and clinical stage T2a or less. Patients who present with more advanced features will require additional therapy, which is also addressed in depth in the articles.

The important aspect of doses is also focussed in detail. Generally, a dose of 140 Gy can be considered as threshold, as doses of less than 140 Gy had inferior results. Doses of 140 Gy and higher had outcomes comparable to radical prostatectomies.

The treatment results of studies all over the world are given for low risk patients, and also for patients with high-risk cancer. Low risk patients treated with brachytherapy have treatment results comparable to radical prostatectomy results. High-risk patients if treated in combination with hormones and/or external radiation therapy do fairly well with still room for improvement.

Treatment morbidity and side effects are also given in detail and are clearly inferior to radical prostatectomy results. Urinary retention rates vary between 1.5 to 34%, whereas late urinary complications including stricture, incontinence, and proctitis are very rare, given the right dose and technique.

An important aspect is the results on erectile dysfunction. Here, brachytherapy clearly has an advantage over radical prostatectomy, with potency preservation rates in the seventies to nineties, if brachytherapy is given alone. These data still can be improved by edition of files.

In summary, permanent interstitial prostate cancer brachytherapy has become an accepted treatment modality for localized prostate cancer. Therapeutic validity is high and side effects are very low as compared to other curative alternatives. Therefore this technique will represent a clear option in the armamentarium of the urologic surgeon.

Dr. Andreas Böhle

Professor of Urology

HELIOS Agnes Karll Hospital

Bad Schwartau, Germany

FEMALE UROLOGY

Effective treatment for mixed urinary incontinence with a pubovaginal sling

Chou EC, Flisser AJ, Panagopoulos G, Blaiivas JG

Department of Urology, School of Medicine, China Medical College and China Medical College Hospital,
Taichung, Taiwan

J Urol. 2003; 170 (2 Pt 1): 494-7