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“Japanese Experience of HIFU in the treatment of localized prostate cancer
using the Sonablate® 500: Five-years experience”

Dr. Uchida presented an analysis of data from 302 prostate cancer patients that he treated with HIFU from January 1999 to April 2004 and with whom he had follow up after more than one year. The resulting subset of patients included 140 men with local prostate cancer (stage T1 to T2NOMO), prostate volume less than 50 ml, no large calcification in the prostate and no anal stricture.

Patient Characteristics

Mean age: 70

Mean pre-operative PSA: 14.7 ng/mL (3.39-89.6)

Mean prostate volume: 25.2 mL

Mean treatment time: 2 hrs, 18 min

Mean follow-up: 19.4 months

Results

- [66%] of patients were disease-free as indicated by [_____] at [5 year][19 month] follow up
- Survival rates compared to preoperative PSA and Gleason scores are as follows:
 - 81% of patients with preoperative PSA of less than 10 were disease free
 - 74% of patients with preoperative PSA of greater than 10 but less than 20 were disease free
 - 16% of patients with preoperative PSA of greater than 20 were disease free
 - 75% of patients with preoperative Gleason score of 2 to 4 were disease free
 - 65% of patients with preoperative Gleason score of 5 to 7 were disease free
 - 57% of patients with preoperative Gleason score of 8 to 10 were disease free

Risks

- Urethral stricture – 21%
(This condition was successfully treated by dilation with metal sounds in all but [3][6] patients. [Int.] urethrotomy or TURP were used in remaining patients.)
- Erectile dysfunction – 22%
- Epididymitis – 5%
- Incontinence – 0.7%
- Urinary retention – 0.7%
- Recto-urethral fistula – 0.7%
- Retrograde ejaculation – 0.7%

Conclusion

HIFU therapy appears to be safe, efficacious and minimally invasive therapy for localized prostate cancer patients, and the preoperative PSA and Gleason score were useful predictors of clinical outcome.