

Department of Urology

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General Summary

We performed research in the following areas: urologic oncology, urinary tract infection and sexual transmitted diseases, urodynamics and erectile dysfunction, kidney and adrenal gland, endourology, and extracorporeal shockwave lithotripsy.

Research Activities

Urologic oncology

1. Basic research: We performed several projects to clarify the biology of urological malignancies and to develop new therapeutic tools. Most projects were reported at the annual meetings of the Japanese Urological Association and the American Urological Association. The projects are as follows.

- 1) Proteomics analysis for a new biomarker for prostate cancer and urothelial cancer
- 2) Gene therapy against urological malignancies
- 3) Research on prostate cancer stem cells

2. Clinical research: Several clinical studies are in progress at our institution. Some works have already been reported at the annual meeting of the Japanese Urological Association.

- 1) Study of seeds and hormones for intermediate-risk prostate cancer.
- 2) Clinical study of high dose rate brachytherapy with external beam radiation therapy against high-risk prostate cancer

Genitourinary tract infection

1. Basic research on the antimicrobial resistance of *Neisseria gonorrhoeae*, especially resistance mechanisms in cephem-resistant *N. gonorrhoeae*.

2. Clinical surveillance of gonococcal urethritis in the Tokyo metropolitan area.
3. Clinical study of combination therapy with clarithromycin and ceftoram for male gonococcal urethritis
4. Psychological education for chronic prostatitis/chronic pelvic pain syndrome

Neurourology and urodynamics

1. Study for relation between dysuria and a phosphodiesterase type 5 inhibitor
 We showed the clinical benefits of a phosphodiesterase type 5 inhibitor for the patients with dysuria.

2. Assessment of overactive bladder by means of the Overactive Bladder Symptom Score

We assessed overactive bladder by means of the Overactive Bladder Symptom Score, which is the latest and most reliable tool for assessing overactive bladder.

3. Study of nocturia

The relation between cardiac insufficiency and nocturia was shown by means of brain natriuretic peptide and the frequency-volume chart.

Kidney and adrenal gland

1. The usefulness of ^{99m}Tc-mercaptoacetyl triglycine scintigraphy for preoperative prediction of renal function remaining after nephron-sparing surgery
2. Laparoscopic surgery for adrenal tumor

Endourology and extracorporeal shockwave therapy

1. Extracorporeal shockwave therapy for Peyronie's disease
2. Holmium-YAG laser ablation of the prostate for benign prostatic hypertrophy

Publications

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Shimomura T, Satoh T, Egawa S. Intermittent androgen deprivation for advanced prostate cancer (low dose antiandrogen therapy) (in Japanese). *Urol Surg* 2006; **19**: 595-600.

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Reviews and Books

Kiyota H, Onodera S, Egawa S. *Nisseria gonorrhoeae* • Chlamydia trachomatis (in Japanese). *Infect Antimicrob* 2006; **9**: 281-6.

Furuta A. Health care usage, botulinum toxin for

overactive bladder. *Rev Urol* 2006; **8**: 234-5.
Yamamoto T, Egawa S. A diagnosis and a
treatment of prostate cancer: which way for-

ward? (in Japanese). *Urol Surg* 2006;
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