YEAR BOOK®

YEAR BOOK OF UROLOGY® 1990

GILLENWATER HOWARDS

1990

The Year Book of UROLOGY®

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Journals Represented

Mosby—Year Book subscribes to and surveys nearly 850 U.S. and foreign medical and allied health journals. From these journals, the Editors select the articles to be abstracted. Journals represented in this Year Book are listed below.

American Journal of Diseases of Children

American Journal of Epidemiology

American Journal of Kidney Diseases

American Journal of Physical Medicine and Rehabilitation

American Journal of Physiology

American Journal of Roentgenology

American Journal of Surgical Pathology

Anesthesia and Intensive Care

Anesthesiology

Annals of Plastic Surgery

Archives of Disease in Childhood

Archives of Internal Medicine

Archives of Pathology and Laboratory Medicine

Archives of Surgery

British Journal of Radiology

British Journal of Urology

British Medical Journal

Cancer

Cancer Research

Cardiovascular and Interventional Radiology

Child Nephrology and Urology

Clinical Nephrology

Current Problems in Obstetrics, Gynecology, and Fertility

European Journal of Cancer and Clinical Oncology

European Urology

Fertility and Sterility

Hinyokika Kiyo

International Journal of Radiation, Oncology, Biology, and Physics

Investigative Radiology

Journal of Acquired Immune Deficiency Syndromes

Journal of Andrology

Journal of Clinical Endocrinology and Metabolism

Journal of Clinical Investigation

Journal of Clinical Microbiology

Journal of Clinical Oncology

Journal of Clinical Ultrasound

Journal of Consulting and Clinical Psychology

Journal of Interventional Radiology

Journal of Pediatric Surgery

Journal of Pediatrics

Journal of Surgical Research

Journal of Trauma

Journal of Urology

Journal of Vascular Surgery

Journal of the American Geriatrics Society

Journal of the American Medical Association

Journal of the National Cancer Institute

Journal of the Royal College of Surgeons of Edinburgh

Kidney International Klinische Wochenschrift Laboratory Investigation Lancet Mayo Clinic Proceedings Medical Laboratory Sciences New England Journal of Medicine Nippon Hinyokika Gakkai Zasshi Pediatrics Plastic and Reconstructive Surgery Presse Medicale Prostate Radiology Scandinavian Journal of Urology and Nephrology Seminars in Oncology Surgery, Gynecology and Obstetrics Transplantation Urologia Internationalis Urologic Radiology Urology Research Urology

STANDARD ABBREVIATIONS

The following terms are abbreviated in this edition: acquired immunodeficiency syndrome (AIDS), the central nervous system (CNS), cerebrospinal fluid (CSF), computed tomography (CT), electrocardiography (ECG), and human immunodeficiency virus (HIV).

stract 24-7) did a follow-up of 253 prostatectomy patients. Whereas 79% had a subjective satisfactory outcome, 29% were considered to have a poor outcome by the physicians because of urge incontinence or poor urinary flow.

Pettersson and associates of Sweden (Abstract 13–2) found that routine antibiotic administration to patients with no evidence of bacteriuria was not indicated during and after extracorporeal shock wave lithotripsy.

Claesson and associates of Sweden (Abstract 15–1) analyzed partial unilateral ureteral obstruction in newborn rats. Minimal deterioration of renal function was noted during a 1-year follow-up period. Van Cangh and associates of Belgium (Abstract 15–4) reported a 72% success rate (28/39 patients) and a 21% clinically improved rate (8/39 patients) after

percutaneous endoureteropyelotomy.

Fossa and associates of Oslo (Abstract 10-8) reported a response rate from a multicenter European trial of 21% for α -interferon alone and 16% for combined interferon and vinblastine therapy in patients with renal cell carcinoma. Oliver and associates of England (Abstract 10-9) reported a 7% response rate (three complete and two partial spontaneous responses) in metastatic renal cell carcinoma. Seven of 52 patients responded to α -interferon received on progression. Wang and associates of New York Hospital (Abstract 10-12) described 32 patients with metastatic renal cell carcinoma who received adoptive immunotherapy with periodate and interleukin-2-activated autologous leukocytes. Two of 32 had a complete response, and five (22%) had a partial response.

From Japan, Yagi (Abstract 22–1) demonstrated that the amount of binding of six kinds of lectins correlated with the malignant potential of bladder cancer cells better than with the blood group antigens. See and associates of Iowa (Abstract 22–5) found that heparin prevents adherence of transitional tumor cells to sites of injury in the urtothelium. The tumor cells were being dropped in the red blood cell-fibrin clot at the sites of injury. Tannock and associates from Toronto (Abstract 22–6) found a 40% response rate (12/30, 4 complete and 8 partial) after chemotherapy using methotrexate, vinblastine, doxorubicin, and cisplatin (M-VAC) for metastatic transitional cell cancer. One drug-related death occurred and 54% of patients required hospitalization for management

of toxic complications.

Maier and Baumgartner of Vienna (Abstract 22–8) found that hyaluronidase plus mitomycin C prevented more bladder carcinoma recurrences than mitomycin C alone. Logothetis and associates from M. D. Anderson Hospital in Texas (Abstract 22–12) found a 36% complete response in 97 patients with unresectable urothelial tumor after treatment with cisplatin, cyclophosphamide, and doxorubicin chemotherapy. Seventeen of 35 patients responding had less than 100 weeks' response. Scher and associates of Memorial Sloan-Kettering Cancer Center and New York Hospital (Abstract 22–13) reported a 21% complete response to MM-Vac chemotherapy in 71 patients with muscle invasive bladder cancer, Eapen and associates of Ottawa (Abstract 22–14) reported a 96% complete response of muscle invasive bladder cancer to intra-arte-

Introduction

The 254 abstracts in the 1990 YEAR BOOK OF UROLOGY were selected from more than 3,000 articles reviewed to provide a quick reference source for the latest urological literature. All articles were chosen for their clinical relevance. The order of presentation follows that of the textbook *Adult and Pediatric Urology*. Of these 254 abstracts, a few deserve to be singled out as particularly interesting and timely for the practicing

urologist. These "best of the best" are summarized below.

Kabalin and associates of Stanford (Abstract 25–29) performed transrectal ultrasounds-guided prostate biopsies in 27 men more than 18 months after radiation therapy. Ninety-three percent had positive biopsies. Leroy and associates of Paris (Abstract 25–12) reported the successful use of iodine-123 labeled monoclonal antiprostatic acid phosphatase to detect lymph node invasion in 15 patients. The study was negative in ten patients, none of whom had cancer, and positive in five patients,

three of whom had cancer on histologic examination.

Gervasi and associates from Houston (Abstract 25-13) found that patients with a single microscopic lymph node metastasis in prostate cancer had a 57% chance at 5 years and an 80% chance at 10 years of distant metastasis. Hudson and associates in St. Louis (Abstract 25-3) and Drago and associates in Columbus (Abstract 25-4) reported that serum prostate specific antigen values were not adequate for random screening of prostate cancer. Prostate specific antigen is very useful for monitoring prostate cancer patients. Hodge and associates of Stanford (Abstract 25-5) found 66% positive results of ultrasonic-guided transrectal prostate biopsies in 251 patients with abnormal prostates on rectal examination. Random biopsies of contralateral normal-feeling prostate revealed cancer, with 42% B1 and 60% B2 lesions. In contralateral ultrasonic examination of normal glands, 20% had positive biopsy results. Carter and associates of Johns Hopkins (Abstract 25-6) evaluated ultrasound examination of the contralateral lobe of 59 patients with cancer palpably confined to one lobe. Ultrasound detected 13 of 25 unsuspected cancers (52% sensitivity).

Lange and associates of Minneapolis (Abstract 25–11) found an elevated prostate specific antigen level after prostatectomy in 16 patients, all of whom had recurrences. Labrie and associates of Quebec (Abstract 25–20) examined the addition of aminoglutethimide and low-dose hydrocortisone to the treatment of prostate cancer patients relapsing after treatment with flutamide and castration. They reported an 0.8% complete response and a 1.7% partial response. Crawford and associates (Abstract 25–19) reported on a multicenter controlled trial of leuprolide with and without flutamide in prostatic cancer. The addition of flutamide gave a 16.5 vs. 13.9 months progression-free survival and a mean sur-

vival of 35.6 vs. 28.3 months.

Roos and associates (Abstract 24–4) did a multinational evaluation indicating that patients have a 1.45 relative risk of mortality and three to seven times the reoperation rate after a transurethral prostatectomy compared with open prostatectomy. Neal and associates from England (Ab-

rial cisplatin, used as a radiosensitizer, and concurrent radiation. There was one death from toxicity.

Seaquist and associates of Minneapolis (Abstract 9–2) reported that there is a familial clustering of diabetic kidney disease and diabetic end-

stage renal disease.

Schramek and associates from Vienna (Abstract 1–2) evaluated patients with hematuria according to the morphology of the red blood cells. Eighty-five percent of patients with eumorphic forms had urological disease. The patients with dysmorphic forms had diagnoses of medical renal disease. In 2 years, 2 of 132 patients had new disease identified at checkups.

Schwab and associates of Durham (Abstract 2–1) found no difference in nephrotoxicity between nonionic and ionic contrast agents. McClennan from St. Louis (Abstract 2–2) reviewed contrast media reactions and concluded that the new lower osmolar contrast media and, specifically, nonionic contrast media have a better patient tolerance and safety profile.

Andres and associates of Madrid (Abstract 1–1) found that hypercalciuria and hyperuricosuria were the apparent causes of hematuria in 60% of adult patients. Previous trials have shown an association between hy-

percalciuria and isolated hematuria in children.

Mee and associates of San Francisco (Abstract 7–1) found that radiographic assessment of renal trauma is necessary only if there is gross hematuria, microscopic hematuria with shock, or penetrating trauma. Monstrey from The Netherlands (Abstract 7–3) followed 435 patients for an average of 5.6 years after renal trauma. None had hypertension that could be attributed to the trauma.

Brindley and associates of England and Germany (Abstract 27–8) implanted hypogastric plexus stimulators for obtaining semen from seven paraplegic men. All seven had seminal emission and two have become fathers. Ho and associates from Hong Kong (Abstract 27–10) reported only one pregnancy in 124 intrauterine inseminations in 47 couples with

oligoasthenospermia.

Findlay and associates of Philadelphia and Palo Alto (Abstract 30–1) found that a transdermal testosterone patch applied to the scrotum gives a satisfactory serum concentration. Giwercman and associates of Denmark (Abstract 30–3) found a 1.7% incidence of carcinoma in situ in men with a history of cryptorchidism. Thomas and associates of Toronto (Abstract 30–4) reported a 3.7% incidence of relapse in 81 seminoma patients observed on a surveillance protocol. Schultz and associates of Indianapolis (Abstract 30–5) followed 21 patients in whom a residual mass was observed radiographically after they completed chemotherapy for seminoma. They believe observation is warranted for masses both smaller and larger than 3 cm. Loehrer and associates of Indianapolis (Abstract 30–7) reported a 21% response with salvage chemotherapy that includes ifosfamide for metastatic testicular cancer patients who did not respond to standard treatment.

Ishii and associates of Japan (Abstract 31-5) reported that intracavernous injection of prostaglandin E1, 20 mg, produced complete erection

in 62% and incomplete erection in 24% (all satisfactory for sexual intercourse). No priapism was observed. Aboseif and associates of San Francisco (Abstract 31–14) further defined the penile venous anatomy. The cavernous and crural veins comprise the main drainage system of the corpora cavernosa. The superficial venous system drains the skin and fascia. The intermediate venous system, consisting of the dorsal and circumflex veins, drains the glans and corpus spongiosum and contributes to drainage of the corpora cavernosa. Shantha (Abstract 31–18) reported from Atlanta that terbutaline, a B₂-adrenergic agonist, is effective in eliminating intraoperative erections.

Peña reported from New York (Abstract 42–1) on repair of the persistent cloaca in 54 girls using a posterior sagittal and rectovaginal urethro-

plasty. This technique offers the greatest versatility and safety.

Åkerlund and associates of Sweden (Abstract 23–2) reported on the long-term follow-up (5 to 11 years) of upper tracts after the Koch pouch. Five of 17 patients (29%) had some upper tract deterioration severe in only one instance.

Lindsjö and associates reported from Sweden (Abstract 6-2) that a new calcium-containing organic marine hydrocolloid (Ox-Absorb) reduced the urinary excretion of oxalate. Excretion of calcium was not af-

fected.

Gabrilove and associates of New York (Abstract 24–8) and Schlegel and Brendler of Johns Hopkins (Abstract 24–9) reported on the use of gonadotropin-releasing hormone analogues in treating benign prostatic hypertrophy. In these studies prostate size decreased by 40% to 50% and voiding improved. Complications included impotence, hot flashes, and the inconvenience of daily subcutaneous injections.

Vicente and associates of Spain (Abstract 24–12), Nordling and associates of Denmark (Abstract 24–13), and Machan and associates from London (Abstract 24–14) reported the successful use of metal spiral or mesh stents placed in the prostatic urethra of men with benign prostatic

hypertrophy. Flow improved to 10 to 14 cc/sec.

Finally, Walker and associates of England (Abstract 9-5) found that, in 19 patients, a low-protein diet slowed the progression of renal failure.

As in the past, comments for particular chapters were written by expert contributors, and we would like to acknowledge their help. Jackson E. Fowler, Jr., M.D., of the University of Illinois provided the commentary for Chapter 4, Urinary Tract Infection; Chapter 26, Prostatitis; and Chapter 29, Infection and Urethritis. Alan D. Jenkins, M.D., of the University of Virginia commented on Chapter 6, Calculus Formation; Chapter 11, Percutaneous Stone Removal; and Chapter 12, Ureteroscopy. Stuart M. Flechner, M.D., of Stanford University provided the comments for Chapter 16, Transplantation. E. Darracott Vaughan, Jr., M.D., of The New York Hospital—Cornell Medical Center wrote the comments for Chapter 17; Renovascular Disease. William D. Steers, M.D., of the University of Virginia, provided the commentary for Chapters 19 and 20, Voiding Function and Voiding Dysfunction. Also, special thanks are due to Osamu Yoshida, M.D., and Yoshiyuki Kakehi, M.D., of Kyoto Uni-

versity, who reviewed a great many articles in Japanese-language journals and kindly provided us with English-language abstracts of the most interesting of these, thus considerably broadening our annual survey of the world's urological literature.

Jay Y. Gillenwater, M.D.

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