Kidney Stone Disease
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Say NO to Stones!
Foreword I

About one person in ten will have a urological stone over their lifetime. Also about 60–70 % of those individuals will have recurrent stones! This well written, clearly articulated and comprehensive book about urolithiasis, urological stones, by an expert in the field, David Schulsinger, and his co-authors discusses all aspects of stone disease, directed to patients with this condition and their families.

In my 40 years in the practice of urology there is no area that has changed as much as the management of patients with stone disease. When I began practice, most kidney and ureteral stones were removed by open, invasive, surgical procedures requiring incisions through several layers of muscles, often with the removal of a rib and incisions into the kidney or ureter. Patients could easily have spent days in the hospital while recovering from these surgeries. In addition, often we could not remove all the stones requiring additional treatment! The first change was when we discovered we could insert small tubes into the kidney, enlarge the tract and look directly at the stone and destroy it with newly invented forms of energy, a procedure called percutaneous lithotripsy. Then small tubes, called ureteroscopes, were developed so we could look into the ureter and kidney and again fragment and remove ureteral stones. Before these advances, we would blindly insert a small tube into the ureter, open a basket, and move the basket up and down “trolling” for the stone, when we felt the resistance we would close the basket, pull down the tube with our fingers crossed and hope to remove the stone! The third advance came from “thinking out of the box” and Dr. Christian Chaussy in Munich discovered that focused shock waves on a stone without an incision could fragment stones to small pieces, which would pass. Extracorporeal shock wave lithotripsy was born. As a consequence, open stone surgery is rarely needed today and “blind” basketry is only of historical interest, all to the benefit of the patient. At the same time we learned more about stone prevention, developed new medical drugs to prevent the recurrence of stones and finally developed drug regimens for enhancing the spontaneous passage of small ureteral stones, known as medical expulsive treatment.

This book illustrates all aspects of stone disease from inherited factors and personal habits, especially dietary factors, including medical treatments for prevention of both stone formation and stone recurrences. The relevant anatomy is clearly shown, and the different types of stones described and complemented by excellent illustrations. The book continues with clear descriptions of the various interventional forms of treatment including the pros and cons
of each. The chapters are often punctuated with relevant comments from patients who unfortunately have suffered from urological stones. Medical management and necessary life style changes are then reviewed for patients with different types of stones. Finally, in a unique chapter the authors give advice as to who should treat your stone and where. Additional changes that have taken place since I began my practice has been the development of “sub-specialists.” Thus, across the country there are experts, such as Dr. Schulsinger, who specialize in the area of stone disease. Moreover, we now know the success of various procedures with lower complications occurring in hospitals with high volume of care for a specific problem performed by “high volume” surgeons. Finally, although this book is primarily directed to patients and their families, I feel it will be an excellent reference book for primary care physicians who without a doubt will take care of patients with stone disease. In addition, urologists will also benefit from the book, a great deal of highly valuable informative information in one concise package.

New York, NY, USA E. Darracott Vaughan Jr.
What would a patient want in a book on stone disease? Nothing more than an understanding of the multiple different clinical issues that arise in dealing with this clinical entity. This patient-centric compendium presents in impressive detail the nuances of stone disease whether it be medical, surgical or nutritional. In this text, Dr. Schulsinger presents a highly personal and comprehensive approach to clinical problems and solutions that arise in the management of patients with stone disease. The patient will see this unique field through the eyes of a practitioner who has lived in this world for almost two decades. A skilled endourologist, he shares a broad knowledge of dealing with the various complex situations that arise in treating patients with stone disease. Endourology is one of the numerous miracles coming out of twentieth-century medicine, having evolved over a relatively short period of time. In these days of cost containment, endourologic procedures are now preferred as they allow the patient a shorter hospital stay and more rapid return to work. These methods have minimized patient morbidity and reduced the fear of more extensive surgical procedures. The results have significantly enhanced urologic care by improving outcomes, reducing costs and enhancing patient satisfaction. I am certain any patient would find great interest and solace in this guide to treatment of stone disease.

Stony Brook, NY, USA

Wayne C. Waltzer
Preface

As a fellowship- and residency-trained urologist with a background and major in nutritional biochemistry, I had the good fortune of combining these concentrations into a profession to best aid and guide my patients. I am an endourologist with a concentration in treating urolithiasis, or urinary tract stones. In my professional career, I have surgically treated over 8,000 patients. Surgically, we have methods to treat both large and small stones. Medically and nutritionally, we have resources to treat all stone types and prophylactically prevent future stones. My motto in treating patients with kidney stones is “I leave no stones unturned!”

I share with you my own personal encounter with pain, diagnosis, and surgeries. The first two chapters identify a view through patient medicine and physician medicine. I look at situations through the eyes of a physician and the interpretation as a patient and how these perspectives differ from each other.

It was through this journey that I became compelled to share with you and prospective patients the questions and skills needed to be an empowered patient. I provide you with the appropriate questions to ask, the methods to make the diagnosis, the understanding of different treatment options, and the means of selecting the physician who is best suited for you. I share with you the stories from my patients and a workable and sensible approach to manage, treat, and ideally prevent future stones.

I am grateful and wish to thank my patients whom I meet, treat, and learn from each and every day and can appreciate the adage “no two patients are alike,” just as no two surgeries are equivalent. For their untold patience and incredible understanding, I dedicate this book to my loving wife Kari and my endearing children Ariel and Hailey.

Stony Brook, NY, USA

David A. Schulsinger, MD
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**E. Daracott Vaughan**, my fellowship advisor and urology mentor who gave me the second chance to pursue my academic dreams in urology. A Doctor’s Doctor who showed me the necessary and appropriate approach to challenging urologic procedures.

**R. Ernest Sosa**, my endourology mentor, who I am grateful for allowing me to refine my endourology skills and enforcing within me the importance of paying attention to detail. I carry those words with me both inside and outside of the operating room. Thank you for showing me the epitome of superb bedside manners, validating for me that surgical care and bedside manners do co-exist!

**Wayne C. Waltzer**, my chairman, who I am grateful and very appreciative for creating an academic environment to pursue my urologic endeavors.

**Philip Li** my best friend and colleague who has inspired me to be a “starter” and “finisher” and maintains a clear perspective, “life is beautiful.”

**Marc Goldstein** a friend, colleague, and running partner who has been there in times of need and has provided the insight and understanding of a world class urologist.

**Andrew Schneider**, a friend, marathon running partner, and colleague since medical school who I am grateful for always providing the moral clarity and understanding of life.
Hong Kim, my residency chairman, who I am grateful for his incredible patience and who has taught me the critical fundamentals and basic urological principles to be a good clinical urologist, which I will carry throughout my professional career.

Urology staff who I work with as a team each and every day, providing the best care for our patients. I am greatly appreciative for their daily commitment to patient care and managing patient’s expectations.

My parents and sister who provided the nurturing, love, resources and support for me to pursue my dreams; your advice of “doing the things that make you happy” has greater meaning everyday.

My patients who make each day new and exciting and each surgical case unique and adventurous. I am grateful for your questions, which manage to keep me on my toes and to stay one step ahead. Thank you for bringing interest, new excitement, and keeping my job interesting everyday.
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