

|                         |  |
|-------------------------|--|
| 1. Record Nr.           | UNINA9910438127803321  |
| Titolo                  | Clinical management of urolithiasis / / Thomas Knoll, Margaret S. Pearle; editors  |
| Pubbl/distr/stampa      | Heidelberg, : Springer, 2012   |
| ISBN                    | 1-283-53333-2<br>9786613845788<br>3-642-28732-8  |
| Edizione                | [1st ed. 2013.]  |
| Descrizione fisica      | 1 online resource (223 p.)   |
| Altri autori (Persone)  | KnollThomas<br>PearleMargaret S  |
| Disciplina              | 616.6/22061  |
| Soggetti                | Urinary organs - Calculi<br>Urinary organs - Diseases<br>Urology   |
| Lingua di pubblicazione | Inglese  |
| Formato                 | Materiale a stampa   |
| Livello bibliografico   | Monografia   |
| Note generali           | Description based upon print version of record.  |
| Nota di bibliografia    | Includes bibliographical references and index.   |
| Nota di contenuto       | Clinical Management of Urolithiasis; Copyright page; Foreword; Reference; Contents; 1: Epidemiology of Stone Disease; 1.1 Prevalence; 1.1.1 Age; 1.1.2 Race; 1.1.3 Sex; 1.2 Risk Factors; 1.2.1 Potentially Modifiable Risk Factors; 1.2.1.1 Diet; 1.2.1.2 Obesity and the Metabolic Syndrome; 1.2.2 Fixed Risk Factors; 1.2.3 Contextual Risk Factors; 1.2.3.1 Climate; 1.2.3.2 Occupational Exposure Risks; 1.3 Healthcare Utilization; 1.4 Future Research; References; 2: Imaging; 2.1 Introduction; 2.2 Computed Tomography; 2.2.1 Indications; 2.2.2 Radiation Exposure; 2.2.3 Recommendations; 2.3 Ultrasound 2.3.1 Indications2.3.2 Recommendations; 2.4 Plain Radiography; 2.4.1 Kidneys, Ureters, and Bladder (KUB); 2.4.2 Intravenous Pyelography (IVP); 2.4.3 Radiation Exposure; 2.4.4 Recommendation; 2.5 Magnetic Resonance Imaging (MRI); 2.5.1 Indications; 2.5.2 Recommendations; 2.6 New Technology; 2.6.1 Digital Tomosynthesis; References; 3: Acute Flank Pain; 3.1 Introduction; 3.2 Clinical Presentation; 3.3 Physiology of Renal Colic Pain; 3.4 Localization of Pain; 3.5 Differential Diagnosis; 3.6 Diagnostic Evaluation; 3.6.1 History; 3.6.2 Physical Examination; 3.6.3 Laboratory Evaluation |

3.6.4 Urine Studies3.6.5 Diagnostic Imaging; Conclusions; References; 4: Observation Versus Active Treatment; 4.1 Observation; 4.1.1 Indication for Observation; 4.1.1.1 Spontaneous Stone Passage Rates; 4.2 Active Treatment; 4.2.1 Indication for Active Treatment; 4.2.1.1 Ureter; 4.2.1.2 Kidney; 4.2.1.3 Timing of Intervention; 4.2.2 Medical Expulsive Therapy (MET); 4.2.2.1 Pathophysiology; 4.2.2.2 MET Indication; Stone Size; Distal Ureter; Proximal Ureter; 4.2.2.3 Class Effect; 4.2.2.4 MET and Corticosteroids; 4.2.2.5 Alpha-Blockade Versus Calcium Channel-Blockade; 4.2.2.6 SWL and MET  
4.2.2.7 URS and MET4.2.2.8 Adverse Events; 4.2.2.9 Cost-Effectiveness; 4.2.2.10 Disseminating MET Outside Urology; References; 5: Indications for Active Treatment and Procedure Selection; 5.1 Indications for Active Intervention; 5.1.1 Kidney Stones; 5.1.2 Ureteral Stones; 5.2 Precautions and Specific Situations; 5.2.1 Urinary Tract Infection; 5.2.2 Anticoagulation and Bleeding Diathesis; 5.2.3 Obesity; 5.2.4 Hard Stones; 5.2.5 Steinstrasse; 5.3 Procedure Selection for Active Removal of Kidney Stones; 5.3.1 Stones in Renal Pelvis or Upper/Middle Calices  
5.3.2 Stones in the Lower Renal Pole (vgl. SWL Chap. 6)5.4 Procedure Selection for Active Stone Removal of Ureteral Stones; 5.4.1 Proximal Ureteral Stones; 5.4.2 Mid-ureteral and Distal Stones; 5.5 Summary; References; 6: Shock Wave Lithotripsy in the Year 2012; 6.1 The Actual Problems of SWL; 6.2 New Ideas for SWL; 6.3 Physics of Shock Waves; 6.4 Mechanism and Theories of Stone Fragmentation; 6.4.1 Tear and Shear Forces; 6.4.2 Spallation; 6.4.3 Quasi-static Squeezing; 6.4.4 Cavitation; 6.4.5 Dynamic Squeezing; 6.4.6 Relevance of Different Theories; 6.4.7 Dynamic Fatigue  
6.5 Factors Influencing Efficacy

---

#### Sommario/riassunto

The prevalence and incidence of urolithiasis are rising worldwide. Accordingly, the diagnosis, management, and prevention of urinary calculi are relevant to all urologists. A host of new technologies, techniques, and medical regimens have been introduced over the past 30 years, from novel imaging procedures and medical expulsive therapy to interventional treatment options. The contemporary urologist should be familiar with and adept at implementing these new concepts and techniques. Furthermore, urologists should be comfortable with the comprehensive metabolic evaluation of high-risk patients and the initiation of dietary or medical preventive measures. This book covers every clinically relevant aspect of urolithiasis and its treatment, both surgical and medical. In addition to providing up-to-date evidence-based recommendations regarding stone management, it reflects the real-life experience of well-known international experts. Each chapter includes tables and algorithms that allow the reader easily to check the requirements for specific procedures and to translate them into clinical practice. Clinical Management of Urolithiasis will serve as an ideal practical guide and source of information for use in everyday clinical routine.

---