1. Record Nr. UNINA9910830487003321

| | |
|---|---|
| Titolo | Interventional cardiology : principles and practice / / edited by George D. Dangas, [and three others] |
| Pubbl/distr/stampa | Hoboken, New Jersey : , : John Wiley & Sons, Inc., , [2022]<br>©2022 |
| ISBN | 1-119-69736-0<br>1-119-69737-9 |
| Edizione | [3rd ed.] |
| Descrizione fisica | 1 online resource (881 pages) |
| Disciplina | 617.412 |
| Soggetti | Coronary heart disease - Surgery |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | Cover -- Title Page -- Copyright Page -- Contents -- Contributors -- Foreword -- Preface -- Acknowledgments -- About the Companion Website -- PART I Principles and Techniques -- CHAPTER 1 Atherogenesis and Inflammation -- Pathogenesis of atherosclerosis -- Inception of the plaque -- Endothelial dysfunction -- Cholesterol -- Oxidative stress -- Progression of atherosclerotic plaque -- Stable plaque -- The vulnerable plaque -- Vulnerable plaque: a shift towards Th1 pattern -- Plaque erosions -- Neoatherosclerosis -- Insights from coronary imaging -- Intravascular imaging (IVUS) -- Backscattered radio-frequency (RF) IVUS -- Optical coherence tomography (OCT) -- OCT assessment of culprit lesions with ACS -- Plaque erosion -- Calcified nodule -- OCT-derived Vulnerable Plaques -- Macrophage infiltration -- Cholesterol crystal (CCs) -- Neovascularization -- Neoatherosclerosis -- Near infrared spectroscopy (NIRS) -- Lipid rich plaques -- Serum markers correlated to plaque inflammation -- Markers of inflammation -- Biomechanical stress as a trigger for plaque progression and rupture -- Future challenges in the treatment of vulnerable plaques -- Conclusions -- References -- CHAPTER 2 The Essentials of Femoral Vascular Access and Closure -- Femoral access -- Anatomy -- Puncture technique -- Ultrasound guided femoral access -- Micropuncture technique -- Femoral access closure -- Manual compression -- Vascular closure |

devices -- Conclusions -- References -- CHAPTER 3 Radial Artery, Alternative Arm Access, and Related Techniques -- Introduction -- Rationale and evidence for transradial access -- Pre-procedural considerations -- Radial vs ulnar -- Right vs left radial -- Proximal vs distal radial approach -- Access technique and navigating common problems -- Access technique -- Navigating common anatomical problems -- Other Barriers.
Complications and management -- Spasm -- Hematoma -- Compartment syndrome -- Radial or brachial artery perforation -- Radial artery occlusion (RAO) -- Catheter kinking and/or entrapment -- Hemostasis techniques -- Future directions -- Distal radial access -- Radial and slender clubs -- "Safe femoral" strategy -- Conclusions -- References -- CHAPTER 4 Optimal Angiographic Views for Coronary Angioplasty -- Catheter selection -- Left coronary -- Right coronary -- Radial approach -- Coronary intubation -- Diagnostic angiography -- Left-sided views -- Right-sided views -- Lesion-specific approach -- Optimal views for each coronary segment -- Left main stem -- Left anterior descending -- Circumflex -- Right coronary artery -- Vein grafts -- Left internal mammary artery grafts -- Coronary variants -- Ventriculography -- Transplanted Heart -- References -- CHAPTER 5 Material Selection -- Guide catheter selection -- Functional design of modern guide catheters -- Size requirements -- Shape selection -- Length -- Side holes or not? -- Variation in access site -- Vein grafts -- Left and right internal mammary arteries -- Gastroepiploic artery grafts -- Support -- Guide catheter support -- Hybrid support -- Adjunctive techniques -- Guide catheter extensions -- Guidewire selection -- Balloon catheters -- Anatomy of a balloon catheter -- Non-compliant balloon catheters -- Microcatheters -- Conclusions -- References -- CHAPTER 6 Statistical Essentials in the Design and Analysis of Clinical Trials -- The fundamentals -- Significance tests and p-values -- Estimating the magnitude of effect -- A 95% confidence interval to express uncertainty -- Interpreting p-values -- Link between p-values and confidence intervals -- Time to event data -- Quantitative data -- Trial design: the fundamentals -- Control group -- Randomization -- Trial size and power calculations.
Additional topics in clinical design and analysis -- Superiority and non-inferiority designs -- Intention to treat, modified intention to treat, and per-protocol analyses -- Bayesian approach -- Conclusions -- References -- CHAPTER 7 Physiologic Assessment and Guidance in the Cardiac Catheterization Laboratory -- Why to use physiology -- Practical considerations of pressure wire measurement -- Pressure recording system -- Guiding catheter selection -- Guide catheter damping -- Pressure wire preparation -- Pressure wire normalization or equalization -- Essential pharmacology -- Performing physiological measurement -- Hyperemic agents -- Pullback and drift check -- Pressure wire assessment after PCI -- Catheter laboratory conditions for pressure wire assessment -- Performing an optimal pressure wire pullback -- Practical tips and tricks of performing the iFR Pullback -- Co-Registration of iFR-Pullback with Angiographic Data -- Commonly missed mistakes in Physiological Assessment -- Pressure-only indices to guide coronary intervention -- Fractional Flow Reserve -- Consideration of right atrial pressure -- Stenosis specific assessment -- Thresholds for significance and evidence to support -- FFR outside typical scenarios -- FFR in Acute Coronary Syndromes -- Algorithmically determined FFR -- The instantaneous wave-free ratio (iFR) and other non-hyperemic pressure ratios (NHPRs) -- IFR in Clinical Trials -- Novel Non-Hyperemic Indices -- NHPR use scenarios -- NHPR-Pullback -- Choosing between NHPR and FFR: when is one better

| | |
|---|---|
| | Conclusions -- References -- CHAPTER 13 Primary and Rescue PCI in STEMI -- Introduction -- Timing of intervention in STEMI -- Procedure technique -- Access site selection -- Primary PCI strategy -- Aspiration thrombectomy -- Stent selection -- Multivessel disease. Primary PCI in the setting of cardiogenic shock. |
| Sommario/riassunto | "The modular presentation of this textbook, both as a printed book, as well as e-book CD rom or web-based program reflects the effort of the publisher and the editors to reach out to many generations of physicians in training. The evolution of specialty certification and recertification has indeed made life learning a reality in our era. Therefore, the present textbook must also fulfill the quest to approach the new and tech-savvy learner, those ahead of an initial certification examination, those in advanced clinical practice who need practical instruction for a certain specialized subject, as well as those who have been practicing for a long time and need to refresh their knowledge with or without a recertification examination ahead of them. We hope that readers will find our approaches both useful and practical"-- |