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Autore	Birch Craig
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Altri autori (Persone)	ByersStacey DimechJulian LightfootNicholas RandallNic SiuAmanda TaylorMatthew WebbMichael WongAndrew
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monitoring-.Chapter 17 Pulmonary artery catheter, cardiac output, and indices of fluid balance-.Chapter 18 Electrocardiography-.Chapter 19 Spirometry and Flow Sensors-.Chapter 20 Respiratory:Measurement of functional residual capacity-.Chapter 21 Respiratory: Closing volume and Anatomical dead space-.Chapter 22 Respiratory: Measurement of airways resistance-.Chapter 23: Respiratory: Pressure-Volume loops-.Chapter 24.Compliance-.Chapter 25 Respiratory Ventilator patterns-.Chapter 26 Measuring Carbon Monoxide Diffusing Capacity/Transfer factor-.Chapter 27 EEG and Depth of Anaesthesia Monitoring-.Chapter 28 Electromagnetic principles-.Chapter 29 Electrical safety.-Chapter 30.Laser surgery -- Chapter 31.Equipment considerations when ambient pressure changes-.Chapter 32 Assessing diagnostic tests and screening tools-.

Sommario/riassunto

Anesthesia is a practical, clinically based medical science. Its conduct requires Anesthesiologists and Intensivists to learn and understand the principles of applied physics related to equipment responsible for the clinical care of patients. This book is written primarily for anesthetic registrars/residents and their teachers, to assist with preparation for the post graduate, basic science examinations in anesthesia and critical care medicine. Each topic is systematically covered using first principles, contextual examples, and illustrations to explain and demonstrate complex concepts. This comprehensive book is an up-to-date compilation of these scientific principles that can easily be applied to any operating theatre or intensive care unit around the world.
