Textbook of Hyperbaric Medicine

K. K. Jain
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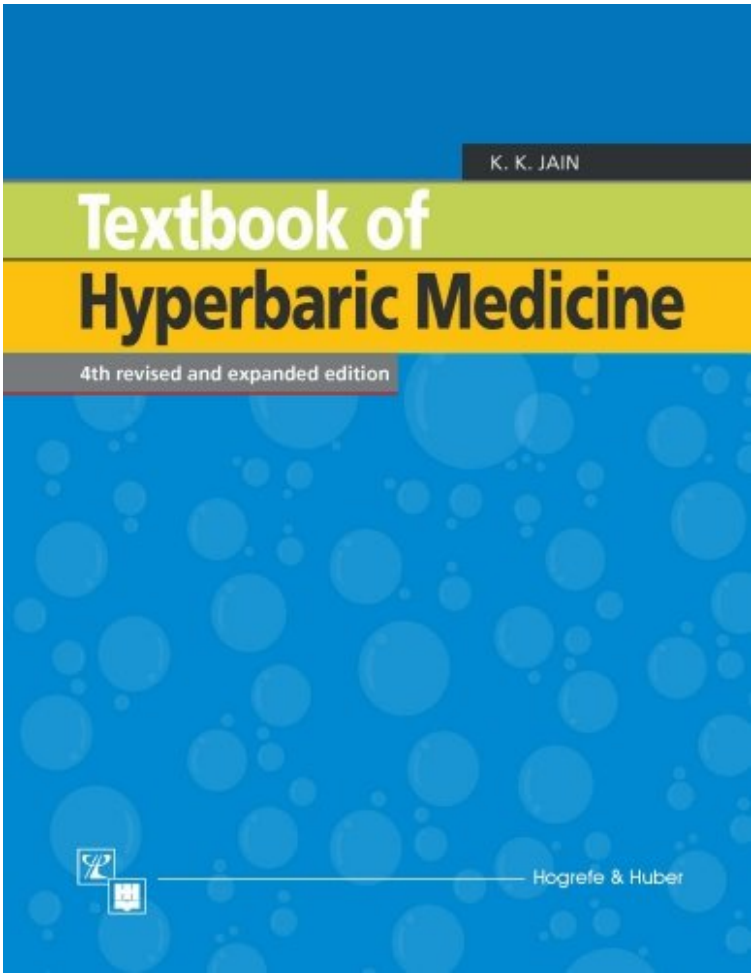

#3770111 in Books Hogrefe Huber Pub 2004-10Original language:EnglishPDF # 1 10.75 x 8.50 x 1.00l, #File Name: 0889372772536 pages | File size: 52.Mb

K. K. Jain : Textbook of Hyperbaric Medicine before purchasing it in order to gage whether or not it would be worth my time, and all praised Textbook of Hyperbaric Medicine:

17 of 20 people found the following review helpful. A uniquely critical technology for modern medicineBy DoulosSummary:A well-founded research based textbook on the medical science, techniques, and varied applications of hyperbaric medical treatments ("HBO"). Written for specialists, clinicians and students.This is a seminal textbook for understanding the medical and scientific facts of hyperbaric medicine, as well as implementing hyperbaric medical technologies to patient care. HBO has widely varied disease and condition applications with a commonality of pressure technology.Medical EconomicsIn the modern world of medical economics, HBO can save Third Party Payers significant costs on patient treatments while delivering significantly improved outcomes and quality of life.HBO is one of those medical sub-specialties that is left behind by the biases of modern medical economics and science. Modern medicine is primarily based on pharmaceutical economics. Significant research investments are powered by the

manufacturing and distribution economics of successful drugs. This is a great and tremendous system, delivering research, understanding and successful treatments that unquestionably alleviate disease and conditions on a broad basis. But, this system is not perfect and is not without isolated failings.HBOT cannot be packaged into a pill, has minimal manufacturing economies, and high ongoing service costs and high overhead, while associated with nominal patient volumes, and nominal billing rates. These economics have long held back this very promising technology (HBO) and its successful applications. Further, double blind studies are virtually impossible - patients perceive pressure changes, or lack thereof, technicians are required to implement pressurization, and oxygen delivery systems may not be able to deliver less than 100% oxygen.Ironically, HBO can power pharmaceutical and surgical applications to higher levels of treatment success bringing cures where partial successes were the norms. (Chapters 9, 13 14, 15, 23, 24, 27, 33).Controversially, HBO has demonstrated good clinical success on incurable diseases and conditions, including Crones Disease, stroke, CP, MS, and others. While modern medicine debates the etiologies and optimal treatment protocols, curative HBO applications can be given today. These applications (esp. Crones, and MS) can further illuminate etiologies therefore, furthering and accelerating alternative and supportive therapies.HBOT supports diabetic wound healing, preventing amputations; enhances infectious disease therapies, saving lives and reducing hospital stays; is used for various poisonings; can provide accelerated surgical recoveries (up to 30-40% faster); and can ameliorate strokes and brain injuries by up to 40% when applied within 4 hours of injury.Medical PhysicsSimply, under pressure, oxygen dissolves in blood serum, and therefore can diffuse to poorly supported disease areas, or injuries. Further, HBO acts as an immuno-suppressant, relieving acutely injured tissues of oedema, preventing further injuries (if applied on a timely basis), as well as supporting the natural healing process.Angiogenesis occurs within 15 - 20 minutes of HBO. It is not known if angiogenesis is initiated by the increased pressure effects, or by the oxygen dissolved in the serum. However, angiogenesis is felt to be a factor supporting accelerated healing in injuries, chronic wounds, and surgical recoveries. Further, little is known about these growth factors and their involvement with healing.Neurological ApplicationsThe chapters on neurological applications are some of the most significant in this text and should be required reading for all neurologists because they hold the greatest single promise to modern healthcare. These chapters are steeped with extensive (and largely ignored) animal and human research papers, extensive clinical studies with supportive SPECT scans and associated clinical outcomes.The brain remains the final frontier of science and brain injuries are the most destructive and expensive to society (#1 killer of children and teenagers, #1 birth defect, #2 killer for adults).We do not understand the brain's response to injury, or disease, much less detail its response to treatments and recoveries. But, we can accept the overwhelming clinical observations made by trained physicians world-wide of positive outcomes to HBO when applied to brain injuries, and cerebral palsy patients.Hopefully, one day we will be able to manufacture a drug, or drug regimen that can replace HBO treatments for brain injuries. However, that day is probably 50 years from today. Therefore, today, we need to apply HBO to brain injuries, note the clinical outcomes, optimize the treatments, and develop ancillary supportive therapies.Diagnostic Imaging is propelling objective clinical research for neurological applications of HBO by demonstrating underlying metabolic activity changes in brain tissues with HBO. Clinical observations significantly correlate with SPECT scan changes. (SPECT using HMPAO have become the scan of choice.) Chapter 18 written by Dr.'s Neubauer and Harch provide an excellent foundation for understanding and support for using HBO for brain injuries and CP.Table of ContentsForward: by Edward Teller, Director Emeritus Lawrence Livermore National Laboratories(In a personal communication to me, Dr. Teller assures the empirical physics of HBO, and is convinced that HBO enabled him to recover from a serious stroke. Dr. Teller is also convinced that his daily HBO regimen has enabled him to continue working full time at 93 years of age).Part I: Basic Aspects1 History of HBO2 Physical, Physiological and Biochemical Aspects3 Effects of Diving and High Pressure on Human Bodies4 Physical Exercise under HBO5 Hypoxia6 Oxygen Toxicity7 HBO Chambers, Equipment, Techniques, Safety8 Indications, Contraindications, and Complications9 Drug InteractionsPart II: Clinical Applications10 Decompression Sickness11 Cerebral Air Embolisms12 Carbon Monoxide and other Tissue Poisons13 Infections14 Wound Healing, Plastic Surgery, Dermatology15 Radionecrosis16 Neurological disorders17 Stroke18 Global Ischemia / Anoxia and Coma19 Neurosurgery20 Multiple Sclerosis21 Headache22 Cardiovascular Diseases23 Hematology and Immunology24 Gastroenterology25 Endocrinology26 Pulmonary Disorders27 Pediatric Surgery28 Traumatology and Orthopedics29 Otolaryngology30 Opthamology31 Obstetrics and Neonatology32 Geriatrics33 As Adjuvant in Rehabilitation and Sports Medicine34 Cancer Radiosensitivity35 Anesthesia36 Emergency Medicine37 HBO as a Speciality: Training, Practice and Research38 HBO Around the World39 HBO in JapanPart III: Appendix, Bibleography, Index40 Appendix: Diagnostic: Imaging and HBOT41 Bibliography42 Index0 of 0 people found the following review helpful. Great resourceBy Teresa J. MitchelI recently started a small hyperbaric clinic, and am at the beginning of a steep learning curve relative to HBOT. This book has helped me and others I come in contact with understand treatment and treatment issues for many of the conditions that hyperbarics is currently being utilized. The chapters on specific conditions are thorough, well-annotated, and specific. This is the first place I go for information. I'm grateful this is updated periodically as the research base in growing rapidly. I highly recommend this book. Don't be deterred by the price, it's worth it.12 of 14 people found the following review helpful. textbook of hyperbaric medicineBy steve

paskusbest, up to date book I have read on HBO.for those who practice its an excellent guide and for thelayman it will open your eyes to what hbo can do(andcannot do) as well letting you know who cannot usethe hyperbaric chamber.

This textbook covers hyperbaric medicine and the wide range of applications of hyperbaric oxygen (HBO) techniques. In addition to explaining the basic principles of HBO therapy, and its application in carbon monoxide poisoning and decompression sickness, the textbook looks objectively and critically at its use in numerous other areas, such as stroke, CNS and neurological disorders, traumatology and wound healing, infectious diseases, rehabilitation and sports medicine, plastic surgery, emergency medicine, obstetrics, and cancer treatment. With over 2000 up-to-date references and an extensive index, the volume is not just a textbook suitable for those seeking an introduction to this expanding field but also a resource for specialists. Also included is a chapter on hyperbaric medicine as a specialty, with recommendations on training, practice, and research.