california fluoroscopy exam study guide

california fluoroscopy exam study guide is an essential resource for radiologic technologists and medical professionals preparing to obtain certification or licensure in the state of California. This comprehensive guide provides detailed information on the exam structure, required knowledge areas, and effective study strategies to ensure success. Understanding the technical, safety, and procedural components of fluoroscopy is crucial for passing the exam and performing competently in clinical settings. This article covers everything from exam content and key topics to practical tips and available resources. Whether you are a beginner or seeking to refresh your knowledge, this study guide will help you navigate the requirements of the California fluoroscopy exam effectively. Below is an overview of the main sections covered in this guide.

- Overview of the California Fluoroscopy Exam
- Core Topics Covered in the Exam
- Study Strategies and Preparation Tips
- Practice Questions and Exam Resources
- Regulatory and Safety Considerations

Overview of the California Fluoroscopy Exam

The California fluoroscopy exam is a specialized certification test designed to assess the knowledge and skills of radiologic technologists in the safe and effective use of fluoroscopic equipment. This exam is mandated by the California Department of Public Health (CDPH) to ensure that practitioners meet the state's stringent standards for patient safety and image quality. Passing the exam is required for technologists who wish to perform fluoroscopy procedures independently or under limited supervision within California.

Exam Format and Structure

The exam typically consists of multiple-choice questions that evaluate candidates' understanding of fluoroscopy principles, radiation safety, equipment operation, and clinical procedures. It is administered in a proctored setting and covers both theoretical knowledge and practical

application. The total number of questions and allotted time may vary, but candidates should expect a comprehensive assessment covering all critical areas related to fluoroscopy practice.

Eligibility Requirements

To be eligible for the California fluoroscopy exam, applicants must meet specific prerequisites, including holding a valid radiologic technologist license or certification. Many candidates also complete designated fluoroscopy training courses approved by the CDPH. These requirements ensure that examinees possess foundational knowledge and clinical experience necessary for safe fluoroscopic practice.

Core Topics Covered in the Exam

The california fluoroscopy exam study guide emphasizes several core subject areas that are fundamental to fluoroscopic practice. Mastery of these topics is vital for exam success and competent clinical performance.

Fluoroscopy Equipment and Operation

Understanding the components and functions of fluoroscopy machines is crucial. This includes knowledge of image intensifiers, x-ray tubes, control panels, and digital imaging systems. Candidates should be familiar with equipment calibration, maintenance protocols, and troubleshooting techniques to ensure optimal operation.

Radiation Physics and Dosimetry

The exam tests comprehension of radiation principles, including x-ray production, interaction with matter, and dose measurement. Candidates need to understand concepts such as attenuation, scatter radiation, and exposure factors that influence image quality and patient dose.

Patient Safety and Radiation Protection

One of the most critical areas is radiation safety for both patients and healthcare personnel. This includes knowledge of dose reduction techniques, shielding methods, regulatory dose limits, and safe fluoroscopy practices to minimize exposure while maintaining diagnostic efficacy.

Clinical Procedures and Protocols

Candidates must be well-versed in common fluoroscopic procedures, such as gastrointestinal studies, angiography, and orthopedic imaging. Familiarity with patient positioning, contrast media administration, and image acquisition protocols is essential to ensure accurate and safe diagnostic outcomes.

- Fluoroscopic equipment components and functions
- Radiation physics and interaction principles
- Radiation dose management and safety protocols
- Clinical fluoroscopy procedures and patient care

Study Strategies and Preparation Tips

Effective preparation for the california fluoroscopy exam study guide involves a structured approach to learning and review. Candidates should develop a study plan that balances theoretical knowledge with practical application.

Create a Detailed Study Schedule

Allocating regular study periods focusing on different exam topics helps reinforce learning. Breaking down content into manageable sections and setting milestones can improve retention and reduce exam anxiety.

Utilize Approved Study Materials

Using official fluoroscopy manuals, textbooks, and CDPH-approved training resources ensures that study content aligns with exam requirements. Supplementary materials like flashcards and summary notes can aid memorization of key facts.

Engage in Hands-On Practice

Practical experience with fluoroscopy equipment and procedures enhances understanding and builds confidence. Whenever possible, candidates should seek clinical rotations or supervised practice sessions to apply theoretical knowledge.

Join Study Groups or Workshops

Collaborative learning environments provide opportunities for discussion, question clarification, and exposure to diverse perspectives. Workshops led by experienced professionals can offer valuable insights and exam tips.

Practice Questions and Exam Resources

Working with practice questions and simulated exams is a proven method to prepare for the california fluoroscopy exam study guide. It helps familiarize candidates with the question format and timing while identifying knowledge gaps.

Sample Question Types

Practice questions often include multiple-choice items covering equipment operation, radiation safety, and clinical scenarios. Understanding how to analyze and select the best answer is essential for maximizing exam performance.

Available Resources

Various resources are available, including:

- Official fluoroscopy exam preparation guides from the California Department of Public Health
- Radiologic technology textbooks with fluoroscopy sections
- Online practice tests and question banks
- Professional organizations offering study workshops and materials

Benefits of Mock Exams

Taking full-length mock exams under timed conditions builds stamina and reduces test-day stress. Reviewing incorrect answers thoroughly helps reinforce learning and improve weak areas.

Regulatory and Safety Considerations

The california fluoroscopy exam study guide includes a thorough review of

regulatory standards and safety protocols mandated by state and federal agencies. Understanding these requirements is essential for legal compliance and patient protection.

California Department of Public Health Regulations

The CDPH sets forth specific rules governing fluoroscopy practice, including licensure, equipment standards, and quality assurance programs. Familiarity with these regulations ensures that technologists operate within legal boundaries.

Radiation Protection Standards

Compliance with radiation safety guidelines involves using appropriate shielding, monitoring exposure levels, and following ALARA (As Low As Reasonably Achievable) principles. These measures protect patients, staff, and the public from unnecessary radiation risks.

Quality Control and Equipment Testing

Regular quality control tests and maintenance of fluoroscopic equipment are required to ensure consistent image quality and safety. Candidates should understand protocols for daily, monthly, and annual equipment evaluations.

Patient Communication and Consent

Effective communication regarding fluoroscopic procedures, risks, and benefits is a critical component of patient care. Obtaining informed consent and addressing patient concerns are integral to ethical practice.

Frequently Asked Questions

What is the California fluoroscopy exam study guide?

The California fluoroscopy exam study guide is a comprehensive resource designed to help candidates prepare for the California fluoroscopy certification exam, covering key topics such as radiation safety, equipment operation, and imaging procedures.

Where can I find the official California fluoroscopy

exam study guide?

The official California fluoroscopy exam study guide can typically be found on the California Department of Public Health Radiologic Health Branch website or through approved educational providers offering exam preparation materials.

What topics are covered in the California fluoroscopy exam study guide?

The study guide covers topics including radiation physics, patient safety, fluoroscopic equipment operation, image quality control, regulatory requirements, and proper use of protective measures during fluoroscopic procedures.

How can I effectively use the California fluoroscopy exam study guide to prepare?

To effectively use the study guide, review each section thoroughly, focus on understanding key concepts, take practice exams if available, and supplement your study with hands-on experience and additional resources on radiation safety.

Are there any online courses that complement the California fluoroscopy exam study guide?

Yes, several online courses and webinars are available that complement the study guide by providing interactive lessons, video demonstrations, and practice quizzes to enhance understanding and exam readiness.

Additional Resources

- 1. California Fluoroscopy Exam Review Guide
 This comprehensive guide is designed specifically for candidates preparing
 for the California Fluoroscopy Exam. It covers all essential topics including
 radiation safety, fluoroscopic procedures, and state regulations. The book
 includes practice questions and detailed explanations to help readers master
 the exam content effectively.
- 2. Essentials of Fluoroscopy for California Radiologic Technologists
 Focusing on fundamental principles and practical applications, this book
 offers clear explanations of fluoroscopic techniques and protocols specific
 to California. It emphasizes patient safety, image quality, and equipment
 operation, making it an ideal resource for technologists preparing for the
 state certification.
- 3. Fluoroscopy Exam Prep: California State Edition

Tailored to meet the requirements of the California Fluoroscopy Exam, this study guide integrates state laws with fluoroscopy physics and clinical procedures. It includes chapter summaries, practice exams, and tips for exam day success. The content is updated to reflect the latest regulatory changes in California.

- 4. Radiation Safety and Fluoroscopy Regulations in California
 This book provides an in-depth look at radiation protection standards and legal requirements for fluoroscopy in California. It is an essential resource for technologists seeking to understand the regulatory environment and maintain compliance. The guide explains safety protocols, dose limits, and reporting procedures.
- 5. Mastering Fluoroscopy Equipment and Techniques for California Exams
 Designed to enhance technical knowledge, this book covers the operation and
 maintenance of fluoroscopy equipment used in California medical facilities.
 It includes detailed diagrams, troubleshooting advice, and procedural best
 practices to ensure proficiency and confidence during the exam and clinical
 practice.
- 6. California Fluoroscopy Exam Study Questions and Answers
 This question-and-answer book is perfect for self-assessment and review. It
 features hundreds of practice questions modeled after the California
 Fluoroscopy Exam, complete with comprehensive answer explanations. The format
 helps test takers identify knowledge gaps and reinforce critical exam topics.
- 7. Clinical Fluoroscopy Procedures: A California Perspective
 Focusing on clinical applications, this guide details common fluoroscopic
 procedures encountered in California healthcare settings. It describes
 patient preparation, procedural steps, and post-procedure care while
 highlighting state-specific guidelines. The book is useful for technologists
 aiming to integrate theory with real-world practice.
- 8. Fluoroscopy Physics and Instrumentation for California Certification This text delves into the physics principles and instrumentation essential for the California Fluoroscopy Exam. It explains x-ray generation, image intensification, and digital fluoroscopy systems in accessible language. Accompanied by illustrations, it helps readers grasp complex concepts critical for exam success.
- 9. The Complete California Fluoroscopy Licensing Handbook Serving as an all-in-one resource, this handbook covers exam content, application procedures, and licensing requirements in California. It guides candidates through the entire certification process with clarity and detail. Additionally, it offers study strategies, sample forms, and regulatory updates to support exam preparation.

California Fluoroscopy Exam Study Guide

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California Fluoroscopy Exam Study Guide

Are you ready to conquer the California Fluoroscopy Exam? Feeling overwhelmed by the sheer volume of material? Struggling to find a study guide that truly prepares you for the exam's unique challenges? You're not alone. Many aspiring radiology technologists find the California Fluoroscopy exam particularly demanding, requiring a deep understanding of complex procedures, safety protocols, and intricate anatomy. The pressure to succeed can be immense, leading to anxiety and frustration. This comprehensive guide will equip you with the knowledge and confidence you need to not just pass, but excel on your exam.

This book, "Mastering the California Fluoroscopy Exam," provides a structured and efficient approach to exam preparation, helping you navigate the complexities of the material and achieve your goals.

Contents:

Introduction: Understanding the California Fluoroscopy Exam

Chapter 1: Fluoroscopic Principles and Techniques

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Chapter 6: Legal and Ethical Considerations in Fluoroscopy

Chapter 7: Exam Strategies and Test-Taking Tips

Conclusion: Final Preparation and Exam Day Strategies

Mastering the California Fluoroscopy Exam: A Comprehensive Study Guide

Introduction: Understanding the California Fluoroscopy Exam

The California Fluoroscopy exam is a rigorous assessment designed to evaluate the knowledge and skills of radiology technologists specializing in fluoroscopy. This introduction provides an overview of the exam format, content areas, and strategies for successful preparation. Understanding the exam's structure is the first step towards effective studying. This section details the number of questions, time limits, question types (multiple choice, true/false, etc.), and passing score. It also outlines the specific areas of fluoroscopy covered by the exam, providing a roadmap for your study plan. Key areas include radiation safety, image acquisition, quality control, patient care, and legal responsibilities. Finally, this section emphasizes the importance of a well-structured study plan, highlighting the benefits of regular review sessions, practice questions, and utilizing various study resources. Knowing what to expect reduces anxiety and improves focus during preparation.

Chapter 1: Fluoroscopic Principles and Techniques

This chapter delves into the fundamental principles of fluoroscopy, providing a detailed explanation of how this imaging modality works. We'll explore the generation of x-rays, image intensification, and the various components of a fluoroscopic system. Understanding the image chain from x-ray production to image display is critical. We'll cover the concepts of image brightness, contrast, and resolution, and how these parameters are adjusted to optimize image quality. Different fluoroscopic techniques will be discussed, including various types of examinations such as upper GI studies, barium enemas, and cardiac catheterizations. We'll explore the advantages and limitations of each technique, including the associated radiation doses and potential artifacts. Specific attention will be given to image acquisition parameters, such as kilovoltage peak (kVp), milliamperage (mA), and pulse rates, and how to adjust them for different clinical situations. Finally, we'll analyze common image artifacts and troubleshoot their causes to improve technical proficiency.

Chapter 2: Radiation Protection and Safety Protocols

Radiation safety is paramount in fluoroscopy. This chapter emphasizes the principles of ALARA (As Low As Reasonably Achievable) and provides a comprehensive overview of radiation protection measures. We'll explore the concepts of time, distance, and shielding, and how to effectively implement these principles in various fluoroscopic procedures. We'll discuss the different types of radiation protection devices available, including lead aprons, thyroid shields, and collimators. Understanding the regulations and guidelines governing radiation safety in California is critical. This chapter will cover state-specific regulations and compliance requirements, highlighting the importance of proper documentation and reporting procedures. Furthermore, we'll discuss patient and staff radiation safety protocols, including appropriate positioning techniques, the use of protective barriers, and the monitoring of radiation exposure levels. Case studies will illustrate how to apply radiation protection principles in practical clinical scenarios.

Chapter 3: Anatomy and Physiology Relevant to Fluoroscopy

A strong understanding of anatomy and physiology is essential for accurate interpretation of fluoroscopic images. This chapter reviews the key anatomical structures and physiological processes relevant to common fluoroscopic procedures. We'll focus on the digestive system, including the esophagus, stomach, small intestine, and large intestine, as they are frequently visualized during fluoroscopic examinations. Cardiovascular anatomy relevant to cardiac catheterization will also be discussed in detail, including the heart chambers, valves, and major blood vessels. The chapter incorporates high-quality anatomical illustrations and diagrams to enhance understanding. Clinical correlations will be used to connect anatomical knowledge to fluoroscopic image interpretation, enabling students to accurately identify and locate anatomical structures on fluoroscopic images.

Chapter 4: Common Fluoroscopic Procedures and Applications

This chapter provides a detailed description of various common fluoroscopic procedures and their applications. We will cover procedures like upper gastrointestinal (UGI) studies, barium enemas (BE), cardiac catheterization, angiography, and arthroscopy. Each procedure will be explained in terms of patient preparation, positioning, image acquisition techniques, and potential complications. Detailed steps involved in each procedure, along with appropriate patient communication and monitoring, will be emphasized. Real-life clinical scenarios will be presented to illustrate how different procedures are performed and interpreted. The emphasis will be on recognizing normal versus abnormal findings, understanding the indications and contraindications for each procedure, and recognizing potential complications.

Chapter 5: Troubleshooting and Quality Control in Fluoroscopy

This chapter focuses on troubleshooting common problems encountered during fluoroscopic procedures and maintaining optimal image quality. We'll explore methods for resolving issues with image brightness, contrast, and resolution. Regular quality control procedures are essential for ensuring the accuracy and safety of fluoroscopic examinations. This section will outline the necessary quality control checks, including the testing of radiation output, image quality, and radiation safety devices. The importance of maintaining detailed records and reporting any quality control issues will be stressed. This chapter includes practical strategies for troubleshooting technical malfunctions and ensuring the equipment functions correctly.

Chapter 6: Legal and Ethical Considerations in Fluoroscopy

This chapter addresses the legal and ethical responsibilities of radiology technologists performing fluoroscopic procedures. We'll discuss patient rights, informed consent, confidentiality, and radiation safety regulations. It emphasizes the importance of adhering to legal and ethical standards in all aspects of fluoroscopic practice, including proper documentation, communication with patients and physicians, and adherence to institutional policies and procedures. The potential for legal ramifications of errors or negligence will be discussed, along with strategies for risk mitigation. Ethical dilemmas in fluoroscopy will also be explored, including issues related to patient autonomy, beneficence, non-maleficence, and justice.

Chapter 7: Exam Strategies and Test-Taking Tips

This chapter provides practical exam strategies and test-taking tips to maximize your performance on the California Fluoroscopy exam. We will discuss effective study techniques, time management strategies during the exam, and approaches to tackling different question types. We'll provide advice on how to effectively manage exam anxiety and approach the exam with confidence. Practice questions and mock exams are crucial for familiarizing yourself with the exam format and identifying areas needing further review. Effective time management strategies and strategies to avoid common pitfalls during the exam will be discussed. This section will help you optimize your study efforts and approach the exam with a clear and confident strategy.

Conclusion: Final Preparation and Exam Day Strategies

The conclusion summarizes key concepts and reinforces the importance of thorough preparation. It offers a checklist of final steps to ensure readiness for the exam and provides strategies for managing exam-day stress and anxiety. We'll cover practical tips for optimizing your exam performance, including how to properly manage your time, how to prioritize difficult questions, and how to maintain focus and concentration throughout the examination. We'll reiterate the importance of a positive mindset and encourage self-belief in your ability to succeed.

FAQs

- 1. What is the passing score for the California Fluoroscopy exam? The passing score is determined by the licensing board and may vary. Check the official website for the most up-to-date information.
- 2. How many questions are on the exam? The exact number of questions can vary, so it's best to consult the official exam blueprint.
- 3. What types of questions are on the exam? Expect multiple-choice, true/false, and potentially other question formats.
- 4. What topics are covered on the exam? The exam covers all aspects of fluoroscopy, from principles and techniques to radiation safety and patient care.
- 5. How long is the exam? The exam duration is specified by the licensing board; refer to official materials.
- 6. Are there practice exams available? Several resources offer practice questions and mock exams to help you prepare.
- 7. What study materials are recommended? This study guide, along with textbooks on radiography and fluoroscopy, are valuable resources.
- 8. How can I register for the exam? Registration details are available on the California licensing board's website.
- 9. What if I fail the exam? The licensing board outlines procedures for retaking the exam. Review your weaker areas and try again.

Related Articles:

- 1. Radiation Protection in Fluoroscopy: This article delves deeper into radiation safety principles, techniques, and regulations.
- 2. Fluoroscopic Image Quality Optimization: A detailed explanation of adjusting parameters for optimal image quality.
- 3. Common Fluoroscopic Artifacts and Their Causes: Troubleshooting guide for common image artifacts.
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- 5. Cardiovascular Anatomy for Fluoroscopic Interventions: Anatomy relevant to cardiac catheterization and angiography.
- 6. Legal and Ethical Issues in Medical Imaging: Broader discussion of legal and ethical considerations in radiology.

- 7. Patient Communication and Education in Fluoroscopy: Importance of effective communication with patients undergoing fluoroscopy.
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Whan Park, John Fritz Angle, 2024 This fully updated new edition is a comprehensive guide to interventional radiology (IR) for medical students, residents, early career attendings, nurse practitioners and physician assistants. The IR Playbook includes procedures, new and updated data, and new images, to stay on the cutting edge of IR. As a specialty, IR is constantly changing and evolving to apply newer technologies and techniques to a breadth of disease pathologies. This book addresses the growing need for a reference for trainees and early career professionals to gain a solid foundation. Let this book serve as your only resource from the first day you find out about IR to the day you take your certifying exam. One and done. The textbook is divided into two main sections, with many images and key point boxes throughout that offer high-yield pearls along with the specific How To's necessary for practice. The first section is designed to give readers an introduction to IR, including radiation safety, commonly used devices, patient care, and anatomy. The second portion is divided by procedure. These chapters cover pathophysiology, indications for treatment, as well as alternative treatments before delving into interventional therapy. This new edition has been fully updated throughout including several brand-new procedures and divided chapters to allow a more in depth look at several disease pathologies. IR Playbook gives medical students, residents, and trainees a full perspective of interventional radiology.

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california fluoroscopy exam study guide: Diagnostic Radiology Physics International Atomic Energy Agency, D. R. Dance, 2014 This publication is aimed at students and teachers involved in programmes that train medical physicists for work in diagnostic radiology. It provides a comprehensive overview of the basic medical physics knowledge required in the form of a syllabus for the practice of modern diagnostic radiology. This makes it particularly useful for graduate students and residents in medical physics programmes. The material presented in the publication has been endorsed by the major international organizations and is the foundation for academic and clinical courses in both diagnostic radiology physics and in emerging areas such as imaging in radiotherapy.

california fluoroscopy exam study guide: <u>Handbook of Test Development</u> Suzanne Lane, Mark R. Raymond, Thomas M. Haladyna, 2015-10-08 The second edition of the Handbook of Test

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california fluoroscopy exam study guide: Pediatric Head and Neck Tumors Reza Rahbar, Carlos Rodriguez-Galindo, John G. Meara, Edward R. Smith, Antonio R. Perez-Atayde, 2013-12-02 The pediatric head and neck cancer patient necessitates a multidisciplinary team of specialists to provide an optimal continuum of care. This A-Z guide provides practical, in-depth information for all medical professionals involved in the evaluation and treatment of these patients. Written in an easy to follow format, each entry contains illustrative figures to aid in pathological and radiographical diagnosis, as well as structured discussion of evaluation and multimodality management. The alphabetical layout eliminates redundancy and allows the busy physician to quickly locate relevant information. Pediatric Head and Neck Tumors is ideal for young physicians as well as attending physicians seeking to expand their knowledgebase to the various subspecialties involved in the multidisciplinary care of their patients.

california fluoroscopy exam study guide: $\underline{\text{Gallstones and Laparoscopic Cholecystectomy}}$, 1992

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california fluoroscopy exam study guide: Self Instructional Manual for Cancer Registrars , 1999

california fluoroscopy exam study guide: *Medical Terminology* Barbara A. Gylys, Barbara A. Gylys, MeD, CMA-A, Mary Ellen Wedding, 1999-02 Each chapter in the volume features outlines, objectives, line drawings, pronunciation keys and worksheets for immediate feedback. The book uses word-building and the body-systems approach to teach terminology. Medical records sections relate the content to real-life situations.

california fluoroscopy exam study guide: Radiography PREP (Program Review and Examination Preparation), Sixth Edition D.A. Saia, 2011-03-04 Ace the ARRT certification exam with the field's most trusted review Maximize your study time -- and your grade -- by focusing on the most important and frequently tested topics 4 STAR DOODY'S REVIEW! This update is once again a highlight in the review book section for preparing for the registry exam in radiography. Using a compilation of noteworthy sources, the author once again provides students with a complete and valuable guide for registry exam review. This is a must-have book for any future radiographer.--Doody's Review Service The entire radiography curriculum summarized in a concise, readable narrative makes it easy to understand and memorize key concepts 860+ registry-style questions, including a 200-question practice test, prepare you for the exam Answers with detailed explanations and references to major textbooks More than 400 illustrations and clinical images Written by an experienced educator and radiography program director who knows exactly what it takes to pass Essential for certification or recertification An author with 35+ years of teaching experience provides everything you need to excel on the exam coursework Summary boxes provide a convenient overview of must-know information The inside covers feature important formulae, radiation protection facts, conversion factors, body surface landmarks, digital imaging facts, acronyms and abbreviations, radiation quality factors, and minimum filtration requirements Coverage of the latest developments, including digital and electronic imaging A complete 200-question practice exam 440+ chapter-ending questions

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 $\textbf{california fluoroscopy exam study guide: } \underline{\textbf{Dysphagia Assessment and Treatment Planning}} \text{ ,} \\ 2008$

california fluoroscopy exam study guide: Christensen's Physics of Diagnostic Radiology Thomas S. Curry, James E. Dowdey, Robert C. Murry, 1990 The Fourth Edition of this text provides a clear understanding of the physics principles essential to getting maximum diagnostic value from the full range of current and emerging imaging technologies. Updated material added in areas such as x-ray generators (solid-state devices), xerography (liquid toner), CT scanners (fast-imaging technology) and ultrasound (color Doppler).

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Huntington's Disease Adam Rosenblatt, 1999-01-01

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california fluoroscopy exam study guide: <u>Textbook of Respiratory Medicine</u> John Frederic Murray, 2000

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