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Julia R. Fielding

Radiology Strategies

RADIOLOGY STRATEGIES

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RADIOLOGY STRATEGIES

Edited by

Julia R. Fielding

Chief of Abdominal Imaging
Department of Radiology
University of North Carolina
Chapel Hill, North Carolina

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PREFACE

I have spent the majority of my professional career teaching radiologists—those in practice and those in training. It is one of the greatest joys in academic medicine and one of the most important parts of my career. As imaging becomes more central to diagnosis, more complex, and very expensive it has become increasingly important for a physician to order the correct test to answer a specific clinical question. This book is an attempt to extend pertinent radiology knowledge to our colleagues—the internists, surgeons, family practitioners, and pediatricians who are often on the front line of medical care. My hope is that this book may be of help to them in treating their patients correctly and effectively.

Dr. Julia R. Fielding
February 6, 2009

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CONTRIBUTORS

Sarah D. Bixby, MD
Department of Radiology
Children's Hospital
Boston, Massachusetts

Carlo Buonomo, MD
Department of Radiology
Children's Hospital
Boston, Massachusetts

Wui K. Chong, MD, FRCR
Department of Radiology
University of North Carolina
School of Medicine
Chapel Hill, North Carolina

Aamer R. Chughtai, MD
Department of Radiology
Ann Arbor, Michigan

Robert G. Dixon, MD
Department of Radiology
University of North Carolina School
of Medicine
Chapel Hill, North Carolina

Taymon Domzalski, MD
Duke University Medical Center
Durham, North Carolina

Julia R. Fielding, MD
Department of Radiology
University of North Carolina
School of Medicine
Chapel Hill, North Carolina

W. Brian Hyslop, MD, PhD
Department of Radiology
University of North Carolina
School of Medicine
Chapel Hill, North Carolina

Valerie Jewells, DO
Department of Radiology
University of North Carolina
School of Medicine
Chapel Hill, North Carolina

Amir H. Khandani, MD
Associate Professor of Radiology
Director, Nuclear Medicine Residency/Fellowship
Director, PET Services
University of North Carolina
School of Medicine

Ellie Lee, MD
Department of Radiology
University of North Carolina
School of Medicine
Chapel Hill, North Carolina

Nancy M. Major, MD
Department of Radiology
Duke University Medical Center
Durham, North Carolina

Wittaya Padungchaichote, MD
Lopburi Cancer Center
Lopburi, Thailand

Bonnie Yankaskas, PhD
Department of Radiology
University of North Carolina
School of Medicine
Chapel Hill, North Carolina



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HOW TO USE THIS BOOK

This book is designed to help health-care providers choose the radiologic test most likely to answer a clinical question. Obviously, no test can replace a careful patient interview and physical examination but radiologic tests have become critical adjuncts for accurate diagnosis of many diseases. For this book, contributing radiologists, all experts in their fields, were asked to choose the most common questions asked of them by their clinical colleagues and recommend the most useful radiologic test or tests.

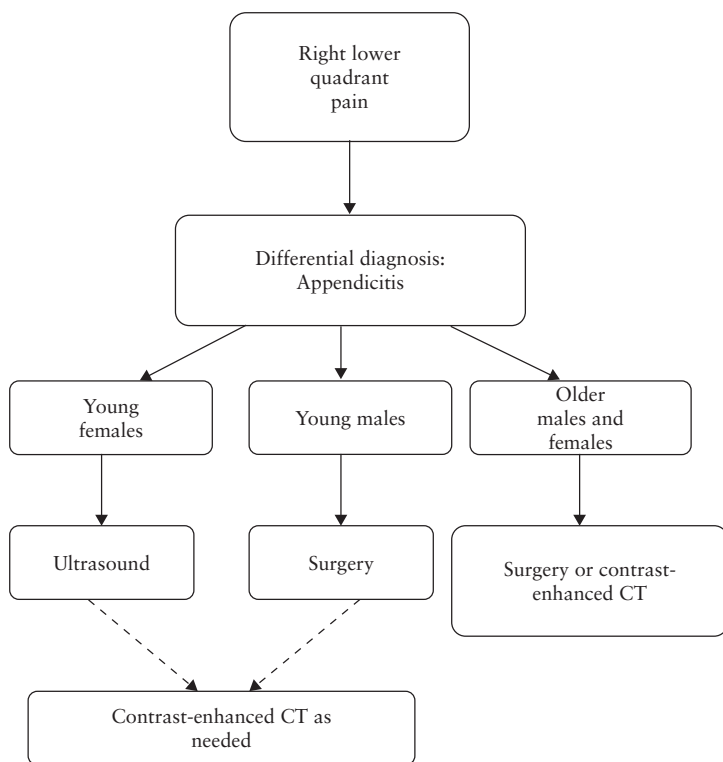
Clinical chapters are devoted to a specific organ system. Each is composed of 10 clinical vignettes. Because of their unique attributes, nuclear medicine tests and pediatric diagnosis are discussed in separate chapters.

This book can be used in two ways. For specific clinical complaints check the index for a heading such as headache or claudication. The appropriate vignette will give the rationale for and recommend a radiologic test. Two images will be included that demonstrate the abnormality. For some common general complaints, you can review each chapter or refer to the test algorithms.

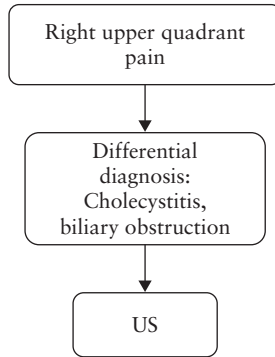
A caveat, the recommendations in this book are based on expert opinion gleaned from years of practice and review of published data. They are guidelines only, and the referring physician must ultimately choose the best course of action for diagnosis of each patient.

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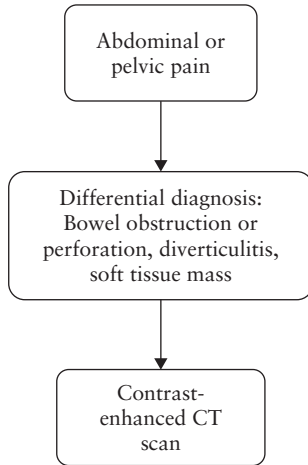
IMAGING ALGORITHMS FOR COMMON CLINICAL PRESENTATIONS



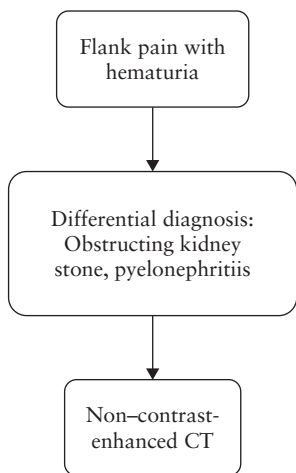
Algorithm 1 Algorithm for patient with right lower quadrant pain.
CT, computed tomography.



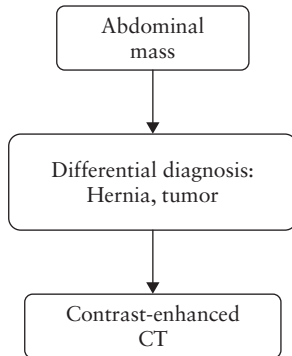
Algorithm 2 Algorithm for patient with right upper quadrant pain. US, ultrasound.



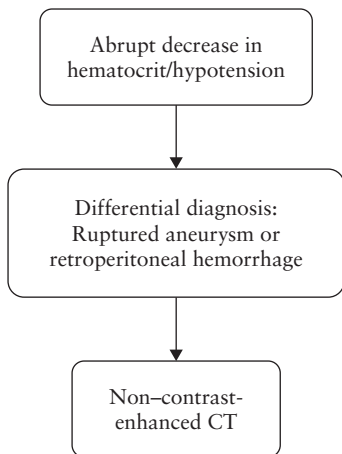
Algorithm 3 Algorithm for patient with abdominal or pelvic pain. CT, computed tomography.



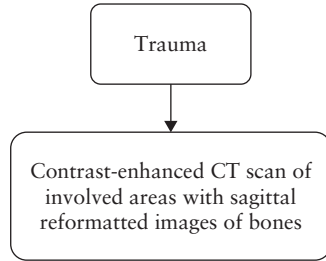
Algorithm 4 Algorithm for patient with flank pain with hematuria. CT, computed tomography.



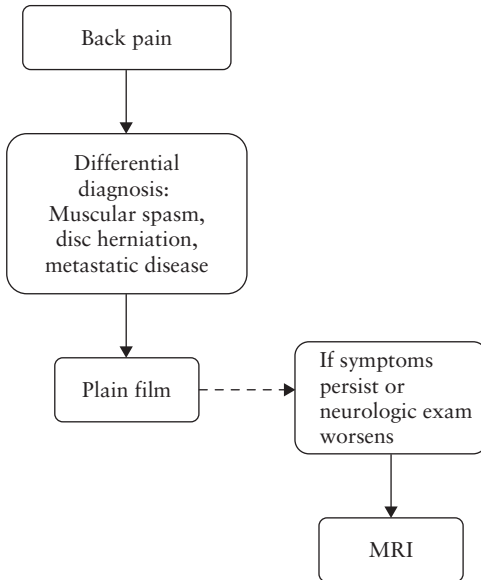
Algorithm 5 Algorithm for patient with abdominal mass. CT, computed tomography.



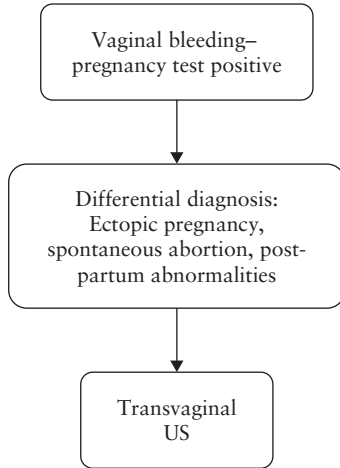
Algorithm 6 Algorithm for patient with abrupt decrease in hematocrit/hypotension. CT, computed tomography.



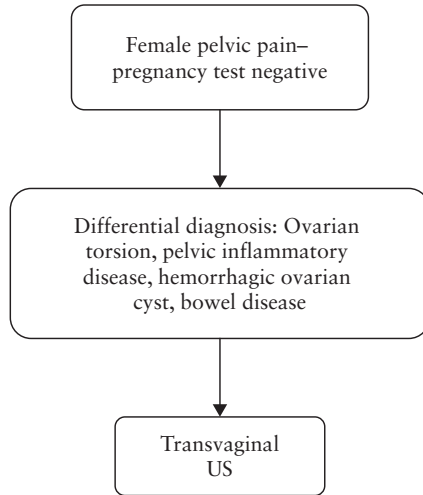
Algorithm 7 Algorithm for patient with trauma.
CT, computed tomography.



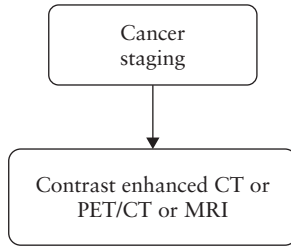
Algorithm 8 Algorithm for patient with back pain. MRI, magnetic resonance imaging.



Algorithm 9 Algorithm for female patient with vaginal bleeding and a positive pregnancy test.
US, ultrasound.

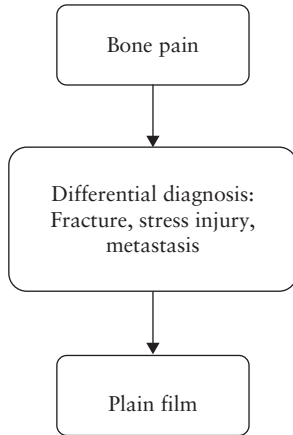


Algorithm 10 Algorithm for female patient with pelvic pain and a negative pregnancy test.
US, ultrasound.

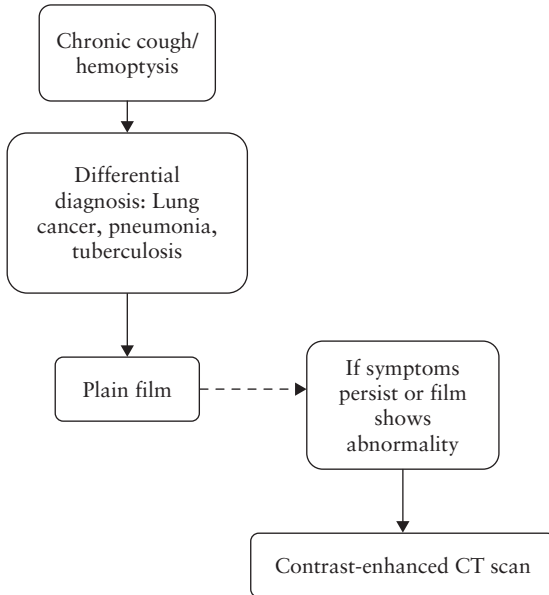


Algorithm 11 Algorithm for cancer staging.

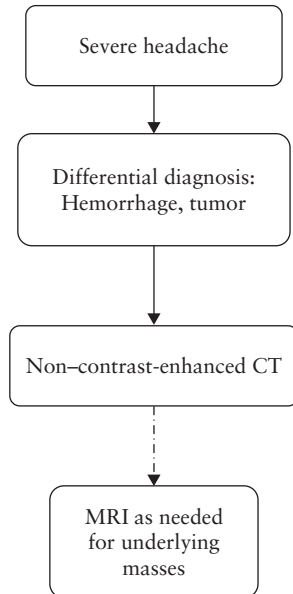
CT, computed tomography; MRI, magnetic resonance imaging; PET, photon emission tomography.



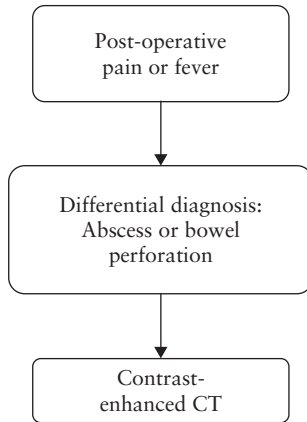
Algorithm 12 Algorithm for patient with bone pain.



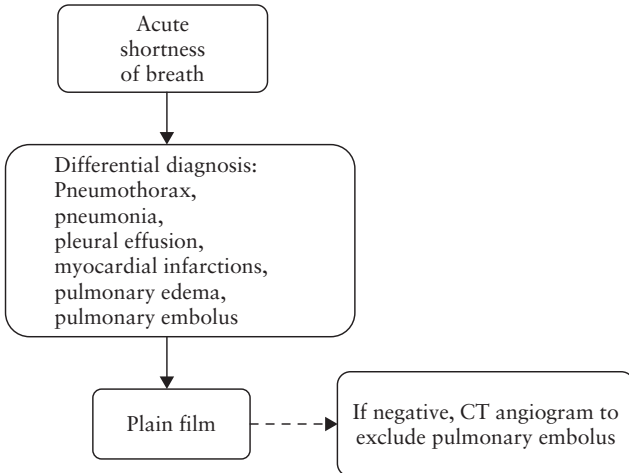
Algorithm 13 Algorithm for patient with chronic cough/hemoptysis. CT, computed tomography.



Algorithm 14 Algorithm for patient with severe headache.
CT, computed tomography; MRI, magnetic resonance imaging.



Algorithm 15 Algorithm for patient with post-operative pain or fever. CT, computed tomography.



Algorithm 16 Algorithm for patient with acute shortness of breath. CT, computed tomography.