Pediatric Tricky Topics, Volume 1

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Pediatric Tricky Topics, Volume 1

A Practically Painless Review

Springer

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To my parents, Martin and Cathy, who made this journey possible, to Patrick who travels it with me, and to my wonderful children Tristan, Skyler, Isabelle, Castiel, and Sunderland who have patiently waited during its writing – and are also the most special of all possible reminders of why pediatric medicine is so important.

Important Notice

Medical knowledge and the accepted standards of care change frequently. Conflicts are also found regularly in the information provided by various recognized sources in the medical field. Every effort has been made to ensure that the information contained in this publication is as up to date and accurate as possible. However, the parties involved in the publication of this book and its component parts, including the author, the content reviewers, and the publisher, do not guarantee that the information provided is in every case complete, accurate, or representative of the entire body of knowledge for a topic. We recommend that all readers review the current academic medical literature for any decisions regarding patient care.

Preface

Keeping all of the relevant information at your fingertips in a field as broad as pediatrics is both an important task and quite a lot to manage. Add to that the busy schedule most physicians and physicians-to-be carry of a practice or medical studies, family life, and sundry other personal and professional obligations, and it can be daunting. Whether you would like to keep your knowledge base up to date for your practice, are preparing for the general pediatric board examination or recertification, or are just doing your best to be well prepared for a ward rotation, *Practically Painless Pediatric Tricky Topics, Volume 1* can be an invaluable asset.

This book brings together the information from several major pediatric board review study guides, and more review conferences than any one physician would ever have time to personally attend, for you to review at your own pace. It's important, especially if there isn't a lot of uninterrupted study time available, to find materials that make the study process as efficient and flexible as possible. What makes this book additionally unusual among medical study guides is its design using "bite-sized" chunks of information that can be quickly read and processed. Most information is presented in a question-and-answer format that improves attention and focus, and ultimately learning. Critically important for most in medicine, it also enhances the speed with which the information can be learned.

Because the majority of information is in question-and-answer (Q&A) format, it is also much easier to use the information in a few minutes of downtime at the hospital or office. You don't need to get deeply into the material to understand what you are reading. Each question and answer is brief – not paragraphs long as is often the case in medical review books – which means that the material can be moved through rapidly, keeping the focus on the most critical information.

At the same time, the items have been written to ensure that they contain the necessary information. Very often, information provided in review books raises as many questions as it answers. This interferes with the study process, because the learner either has to look up the additional information (time loss and hassle) or skip the

information entirely – which means not really understanding and learning it. This book keeps answers self-contained, meaning that any needed information is provided either directly in the answer or immediately following it – all without lengthy text.

To provide additional study options, questions and answers are arranged in a simple two-column design, making it possible to easily cover one side and quiz yourself, or use the book for quizzing in pairs or study groups.

For a few especially challenging topics, or for the occasional topic that is better presented in a regular text style, a text section has been provided. These sections precede the larger Q&A section for that topic (so, for example, neurology text sections precede the question-and-answer section for neurology). It is important to note that when text sections are present, they are not intended as an overview or introduction to the Q&A section. They are stand-alone topics simply found to be more usefully presented as clearly written and relatively brief text sections.

The materials utilized in *Practically Painless Pediatrics* have been tested by residents and attendings preparing for the general pediatric board examination, or the recertification examination, to ensure that both the approach and content are on target. All content has also been reviewed by attending and specialist pediatricians to ensure its quality and understandability.

If you are using these materials to prepare for an exam, this can be a great opportunity to thoroughly review the many areas involved in pediatric practice, and to consolidate and refresh the knowledge developed through the years so far. *Practically Painless Pediatrics* books are available to cover the breadth of the topics included in the General Pediatric Board Examination.

The formats and style in which materials are presented in *Practically Painless Pediatrics* utilize the knowledge gained about learning and memory processes over many years of research into cognitive processing. All of us involved in the process of creating it sincerely hope that you will find the study process a bit less onerous with this format, and that it becomes – at least at times – an exciting adventure to refresh or build your knowledge.

Brief Guidance Regarding Use of the Book

Items which appear in **bold** indicate topics known to be frequent board examination content. On occasion, an item's content is known to be very specific to previous board questions. In that case, the item will have “popular exam item” or “item of interest” beneath it.

Some topics cross over between different subjects; for example osteomyelitis is relevant to both the *Practically Painless Pediatrics Infectious Disease* book and the orthopedic section of this book. In that case, items on the topic will be present in both books, although more extensive coverage of certain aspects will be found in one versus the other. Similarly, various topics overlap between trauma, orthopedics, and environmental medicine. To preserve completeness of coverage, some items for those topics will be found in each of the sections; however, complete repetition of

the items in multiple sections would render the chapters unnecessarily long. It is therefore important to review all three sections to ensure a full coverage of the relevant material.

At times, you will encounter a Q&A item that covers the same content as a previous item within the same chapter. These items are worded differently, and often require you to process the information in a somewhat different way, compared to the previous version. This variation in the way questions from particularly challenging or important content areas are asked is not an error or oversight. It is simply a way to easily and automatically practice the information again. These occasionally repeated items are designed to increase the probability that the reader will be able to retrieve the information when it is needed – regardless of how the vignette is presented on the exam, or how the patient presents in a clinical setting.

Occasionally, a brand name for a medication or piece of medical equipment is included in the materials. These are indicated with the trademark symbol (®) and are not meant to indicate an endorsement of, or recommendation to use, that brand name product. Brand names are sometimes included only to make processing of the study items easier, in cases in which the brand name is significantly more recognizable to most physicians than the generic name would be.

The specific word choice used in the text may at times seem informal to the reader, and occasionally a bit irreverent. Please rest assured that no disrespect is intended to anyone or any discipline, in any case. The mnemonics or comments provided are only intended to make the material more memorable. The informal wording is often easier to process than the rather complex or unusual wording many of us in the medical field have become accustomed to. That is why rather straightforward wording is sometimes used, even though it may at first seem unsophisticated.

Similarly, visual space is provided on the page, so that the material is not closely crowded together. This improves the ease of using the material for self- or group quizzing, and minimizes time potentially wasted identifying which answers belong to which questions.

The reader is encouraged to use the extra space surrounding items to make notes or add comments for himself or herself. Further, the Q&A format is particularly well suited to marking difficult or important items for later review & quizzing. If you are utilizing the book for exam preparation, please consider making a system in advance to indicate which items you'd like to return to, which items have already been repeatedly reviewed, and which items do not require further review. This not only makes the study process more efficient & less frustrating, it can also offer a handy way to know which items are most important for last-minute review – frequently a very difficult “triage” task as the examination time approaches.

Finally, consider switching back and forth between topics under review, to improve processing of new items. Trying to learn & remember many information items on similar topics is often more difficult than breaking the information into chunks by periodically switching to a different topic.

Ultimately, the most important aspect of learning the material needed for board and ward examinations is what we as physicians can bring to our patients – and the amazing gift that patients entrust to us in letting us take an active part in their health.

With that focus in mind, the task at hand is not substantially different from what each examination candidate has already done successfully in medical school & in patient care. Keeping that uppermost in our minds, board examination studying should be both a bit less anxiety provoking and a bit more palatable. Seize the opportunity and happy studying to all!

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About the Author

Dr. Christine M. Houser completed her medical degree at the Johns Hopkins University School of Medicine, after spending 4 years in graduate training and research in Cognitive Neuropsychology at George Washington University and the National Institutes of Health. Her Master of Philosophy degree work focused on the processes involved in learning and memory, and during this time she was a four-time recipient of training awards from the National Institutes of Health (NIH). Dr. Houser's dual interests in cognition and medicine led her naturally toward teaching, and "translational cognitive science" – finding ways to apply the many years of cognitive research findings about learning and memory to how physicians and physicians-in-training might more easily learn and recall the vast quantities of information required for medical studies and practice.

Content Reviewers

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