

BOOK REVIEWS

**AUTISM'S FALSE PROPHETS:
BAD SCIENCE, RISKY MEDICINE,
AND THE SEARCH FOR A CURE**

By Paul A. Offit. 298 pp., illustrated. New York, Columbia University Press, 2008. \$24.95. ISBN 978-0-231-14636-4.

IN RECENT YEARS, THE PUBLIC HAS BEEN IN-creasingly concerned about adverse events that have been attributed to vaccines. Although such safety concerns have existed since the days of Edward Jenner, modern-day opponents of vaccines are waging a particularly aggressive and personal campaign against advocates of vaccines. Paul Offit notes in the opening lines of his book that he has been the target of such personal attacks, partly because of his public support for the safety and efficacy of vaccines and partly because of his relationship with the pharmaceutical industry in the licensure of his rotavirus vaccine.

It is understandable that Offit has chosen to personalize his discussion of the controversy that surrounds vaccines and autism. He focuses less on the conventional scientific presentation of disease burden and incidence rates and instead spotlights people who are involved in the heated debate about autism and vaccines. Understanding that the debate is driven by human interest and emotion, Offit begins with a personal account of two experiences that strongly support his respect for vaccines — his experience as a child with a clubbed foot recuperating in a polio ward, and his experience as a young resident unable to save a dehydrated infant with rotavirus disease. He uses the same personal approach throughout the book to discredit the “false prophets” of autism with scientific reasoning and, more prominently, with an investigation into the motivations of those who claim to hold the answers to the mystery of autism.

Although a number of theories of the cause of autism exist, Offit focuses on the two most publicized theories that relate to vaccines: that autism occurs when the live attenuated virus in the measles vaccine infects children's gastrointestinal tracts, causing toxins and viruses to be absorbed into the brain, and that mercury, which

was once contained in the vaccine preservative thimerosal, is a neurotoxin. Offit outlines numerous scientific studies that refute both claims, but he devotes much of the book to revealing the dubious affiliations and fraudulent practices of the promoters of these two theories.

A particular strength of the book is the chapter in which Offit outlines the basic principles of causality, probability, and the scientific method. In the course of this chapter, Offit also highlights the difficulty of communicating science to the public. He provides disconcerting examples of the media giving equal coverage and credibility to scientists and celebrities in the discussion of medical research. He cautions, “Another challenge of those communicating science to the public is explaining the difference between coincidence and causality. Because we're always looking for reasons for why things happen, this isn't easy.”

Offit attributes blame to every segment of society in the propagation of falsehoods and false hopes regarding vaccine safety. Scientists communicate ineffectively and fail at the game of public relations. Politicians and journalists win favor by attacking the medical and pharmaceutical establishments. The public remains poorly informed and cannot distinguish credible from unreliable sources of information on the Internet and in the media. Finally, his harshest criticism is leveled at physicians who exploit the desperation of the parents of autistic children by offering unfounded therapies that are at best ineffective and expensive, and at worst harmful and life-threatening.

As a clinician who specializes in pediatric infectious diseases and as a vaccinologist, Offit strongly and effectively advocates for vaccines and successfully dispels the myth that vaccines cause autism. There are several diversions in the book, such as the discussion of Dow Corning breast implants and the nuances of conference calls regarding thimerosal, but overall it will be a very helpful book for both medical personnel and parents. A number of other theories about the causation of autism remain and should be rigorously evaluated using the scarce research

funds that are currently available. This message of hope would have been an excellent conclusion to the book.

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GASTROINTESTINAL ONCOLOGY: A CRITICAL MULTIDISCIPLINARY TEAM APPROACH

Edited by Janusz Jankowski, Richard Sampliner, David Kerr, and Yuman Fong. 728 pp., illustrated. Malden, MA, Wiley-Blackwell, 2008. \$329.95. ISBN 978-1-4051-2783-7.

IF MULTIPLE AUTHORSHIP IS A MARK OF QUALITY, this book is a must-read. With 189 authors covering the oncology of the gastrointestinal tract from the esophagus to the anus, as well as the pancreas, hepatobiliary system, and peritoneum, the book is comprehensive indeed. The authors faithfully follow the editorial template of discussing diagnosis, staging (including imaging), treatment, and prognosis and follow-up, spiced at times with information about synoptic epidemiology, molecular pathogenesis, and discussions of primary and secondary preventive strategies.

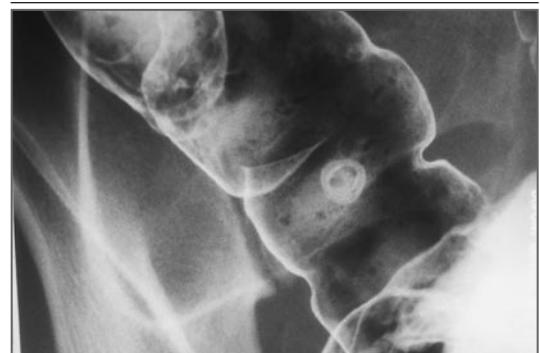
The book is targeted to the members of the multidisciplinary teams that have become mandatory in clinical oncology. The editors aim to provide a sufficient knowledge base for each team member to understand the contributions and places of the other team members in the delivery of integrated care throughout the patient's journey. This goal is largely achieved, but what is often presented is a chronicle of the expertise that can be offered by members of each discipline in the overall management of each type of cancer discussed. Indeed, the word "multidisciplinary" is used less than one might expect.

Exceptions are the excellent chapters on the multidisciplinary approach to the management of colorectal cancer and of rare tumors of the liver. In these chapters, there is a genuine attempt to show a pattern of management within the rich tapestry of planning care for patients with these

cancers, which can be treated in a range of ways. To be fair, the sections in which surgical aspects of treatment are discussed are well balanced, and their authors advocate for the role of the surgeon, whose skills continue to offer the most secure chance of a cure in certain (early) cases. This advocacy is balanced with a discussion of the limitations of surgery, including the complications and deaths that are associated with overly aggressive surgical strategies. With rare exceptions, other types of treatment — such as chemotherapy, radiotherapy, and ablative therapy — do not have surgery's capacity to cure.

As is reflected in the book, surgical decision making is often not evidence based but intuitive. In an age of evidence-based medicine, this can appear deficient, but perhaps the grip of evidence-based medicine is loosening, and surgery is now seen more objectively for its worth. The field of oncology is still dominated in its translation to clinical practice by the randomized, controlled trial, and rightly so. Ablative therapies are covered ad nauseam in different contexts in this book, and it is clear from the evidence presented in the book that their utility still has not been established. It is also pointed out in the book that, surprisingly, colonoscopy screening also lacks an evidence base for reduction of mortality.

The book could do with a glossary of terms and abbreviations to save the peripheral expert some trouble, and in future editions, the misalignment of captions with figures for some radiologic images should be avoided. Inevitably, important recent advances are not captured in the book (the most recent references are from early 2007), and the photomicrographs are a little too close to actually being microscopic, render-



Radiograph of the Colon, Showing a Barium-Covered Polyp.

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