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An Atlas of Induced Sputum: An Aid for Research and Diagnosis. Ratko Djukanovic MD DM and Peter J Sterk MD PhD. New York: Parthenon Publishing Group. 2004. Hard cover, illustrated, 135 pages, $119.95.

Sputum induction has been used for decades to aid in the diagnosis of pulmonary infections. This has proven particularly useful for identifying tuberculosis or *Pneumocystis carinii*. Over the past 15 years the evaluation of induced sputum for cells, soluble mediators, and biophysical and transport properties has become a useful research tool for enhancing our understanding of chronic airway diseases such as asthma, cystic fibrosis, and chronic bronchitis.

Djukanovic and Sterk have collected some of those data in a handsomely illustrated atlas intended for pulmonary researchers. The book is generally well organized, but there are large gaps in the material presented, as well as a substantial amount of redundant material. The emphasis is on the evaluation of cells and soluble mediators in sputum, and the book completely ignores the important field of research related to the measurement of the biophysical properties of airway secretions and sputum clearability, which limits the usefulness of this text. The authors also failed to discuss the relationship between the assessment of mediators in sputum and in other airway samples such as breath condensate.

Chapter 1 discusses techniques for sputum induction using saline inhalation. The authors summarize published guidelines, but they do not discuss alternative techniques for sputum induction such as the inhalation of other hyperosmolar agents, for example, dry powder mannitol, inhalation of ion channel modifiers such as UTP or P2Y2 activators, or the role of chest physical therapy or high-frequency chest wall oscillation. The authors state that ultrasonic nebulization is more effective for sputum induction, but they do not provide data to support that contention. They also briefly mention that salivary contamination should be avoided, but they do not discuss some of the more common techniques for reducing salivary contamination, such as the use of dental dams. Alternative methods for sputum collection, for example, via bronchoscopy or endotracheal tube, are not mentioned. The authors discuss the use of β agonists as beneficial in preventing airway hyperresponsiveness, but they do not explain that β agonists alter the composition and properties of the secretions.

Chapter 2 gives the first of many references to the role of eosinophils in the airway. This topic is also discussed in Chapters 4, 6, and 9, with substantial content overlap. The authors adequately discuss the role of the cellular composition of secretions, but there are several errors. It is stated that lipid-laden macrophages are markers of gastroesophageal reflux, but that is only true if there is aspiration. In children it is more likely that aspiration is due to swallowing difficulties (palatopharyngeal dyskinesia) than to gastroesophageal reflux. The authors also state that a lipid index of > 7 is considered diagnostic of reflux or aspiration. That number should be *70*, as indicated in Chapter 10. Also, the authors do not discuss how the eosinophil content of induced sputum can be modified if the patient is taking corticosteroids.

Chapters 4–7, which deal with specific diseases and patient populations, are well written. Further to the lack of regard for evaluation of the properties of secretions is the common mistake made in Chapter 7, where it is stated that cystic fibrosis secretions are viscous and that there is an increased amount of mucin in the cystic fibrosis airway. Both of those assertions are incorrect.

Chapter 10 is one of the most useful and well written chapters in the book. It discusses interstitial lung disease and occupational lung disease, and the micrographs are beautiful illustrations, as one would expect in an atlas.

Sputum induction is now used long-term for cystic fibrosis therapy in some parts of the world, and, to be comprehensive, a text such as this should summarize that use.

Sputum induction is an important topic, and this atlas makes an attempt at presenting the subject; unfortunately, there are many gaps and the authors failed to include critically important topics, which severely limits the value of the book. Most of the illustrations are graphs of data, and they provide limited information. The majority of the graphs could be eliminated and discussed either in the text or in tables, leaving room for more useful micrographs, as in Chapter 10.

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One Minute Asthma: What You Need to Know, 6th edition. Thomas F Plaut MD. Amherst, Massachusetts: Pedipress. 2004. Soft-cover booklet, illustrated, 64 pages, 100 copies at 99 cents each.

Thomas F Plaut's **One Minute Asthma: What You Need To Know**, 6th edition, presents simple information on asthma management for those uninitiated in the complexities of the disease. The book is similar to other lay health texts in that it presents materials in a concise, readable form while limiting jargon and detail unnecessary for the lay reader. It begins with a brief description of the pathophysiology of asthma and links that to the effects of environmental triggers on airway inflammation. The second section concerns peak flow monitoring. The third section emphasizes the importance of symptom recognition and disease management with asthma management plans. Plaut briefly works through the familiar and the unfamiliar asthma medications in the fourth section, and he dovetails that neatly with the fifth section, which is on inhalation devices. He concludes with a very brief list of resources for further study.

Though **One Minute Asthma** is certainly not a book you can read in a minute (it took me around 30 minutes to read), it is intended as a quick study for the new asthma patient. Physicians and respiratory therapists will find it useful only as a tool for beginning a patient's asthma education. In Plaut's words, "Patients can read a few pages in your waiting room." His style is nonthreatening and intended to motivate the patient to, "work out a clear, zone-based action plan [with your doctor] for treating your asthma

Induced sputum samples are used in a wide range of studies. The application of cutting-edge technology provides not only new scientific understanding through application of this technique, but also new information about the source and characteristics of the sample [17â€“25, 34, 35].Â An Aid for Research and Diagnosis Djukanovic R, Sterk PJ , eds. London: Parthenon Publishing Group, 2004. View Abstract. direct links. for free. Mobile version (beta). Books. Categories. Top.Â Ratko. Djukanovic, Peter Sterk. Download (pdf, 3.50 Mb) Donate Read. Epub | FB2 | mobi | txt | RTF. Editors: Ratko Djukanovic, MD, DM, FRCP; Peter J. Sterk, MD, PhD. Bibliographic Data: The Parthenon Publishing Group, 2004. ISBN: 1-8421-4005-1, 135 pp, hard cover, $139.95. Reviewerâ€™s Expert Opinion: Description: This is a useful reference for the technical and practical analysis of induced sputum samples in the setting of nonmalignant conditions. The book discusses and illustrates the utility and limitations of sputum as a clinical sample and reviews assays not currently used in the clinical laboratory. Purpose: This is a reference for all individuals involved in clinical pulmonary research.