

Summer 2015

Review: Plain Film Evaluation of Patients With Abdominal Pain: Are Three Radiographs Necessary?

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In 1986, *The American Journal of Roentgenology* published an article by Stuart Mirvis, MD, et al. [1] from the University of Maryland School of Medicine titled, “Plain Film Evaluation of Patients With Abdominal Pain:

Are Three Radiographs Necessary?” The authors analyzed the radiographs of 252 consecutive emergency patients. They concluded that the erect abdominal radiograph was not helpful, and, therefore, could be eliminated. The authors also concluded that eliminating that radiograph would result in financial savings, decreased radiation exposure, and more efficient use of technician time without significant loss of diagnostic information. In fact, there were positive findings on the supine abdominal radiographs for 51 (20%) of the 252 patients; in eight (16%) of those 51 patients, the upright radiographs demonstrated the abnormalities better than the supine radiographs. The authors discounted this finding by stating that in three cases, the findings were seen on the chest radiographs and in the remaining five cases, the radiographic finding did not alter the clinical diagnosis or management.

In my view—that of one of the few still-practicing abdominal radiologists with an interest in plain abdominal radiographs—the upright abdominal radiograph continues to be a valuable part of the evaluation of patients with abdominal pain. In the evaluation of the

patient with a gasless abdomen, the upright or decubitus radiograph has proven to be very useful in detecting the string of beads or string of pearls sign that may be the only finding indicating a small bowel obstruction [2, 3]. There are three possible findings on the upper right abdominal image: multiple small bowel air-fluid levels, small bowel air-fluid levels greater than 2.5 cm, and small bowel air-fluid levels of differing levels. Air-fluid levels greater than 5 mm in the same small bowel loop are 100% sensitive and specific for small bowel obstruction [2]. The upright film has also been useful in ruling out a small bowel or large bowel obstruction. This second view of the abdomen can increase the confidence of the interpreting radiologist. It should prevent the radiologist from interpreting the bowel gas pattern as nonspecific, an interpretation that is of little help to a patient’s physician.

Despite the article’s conclusion that the upright abdominal radiograph is rarely needed and that eliminating it would save money, radiation exposure, and time, I maintain that the addition of the upright or decubitus film is valuable in the workup of patients with abdominal pain.

References:

1. Mirvis SE, Young JWR, Keramati B, McCrea ES, Tarr R. Plain film evaluation of patients with abdominal pain: are three radiographs necessary? *AJR* 1986; 147:501–503
2. Thompson WM. The gasless abdomen in the adult: what does it mean? *AJR* 2008; 191:1,093–1,099
3. Thompson WM. Accuracy of abdominal radiography in acute small bowel obstruction: does reviewer experience matter? *AJR* 2007; 88[web]:W233–W238

A Word From the Chair

by
Bruce L. McClennan



With winter now in our rearview mirror, the summer issue of *SRS Notes* will remind us of the many pleasantries of our recent ARRS Annual Meeting in Toronto. While we have ventured “north of the border” before (Vancouver, British Columbia, in 2012), the cool breeze from Lake Ontario did not dampen our enthusiasm for this year’s gathering. As I expected, social media was the technology of the day, with tweets and Facebook updates from *AuntMinnie*, ARRS, and other attendees into our own mobile devices. Electronic exhibits carried the digital flag well throughout the week and—surprisingly, at least to me—nearly 500 ARRS members attended the meeting virtually!

Digital program books, abstracts, and session handouts were easy to access, further decreasing our dependence on paper. Implementation of new technology options enabled attendees to claim CME credits with just a few clicks and chart their course online throughout the week. Our SRS Guest Lecture was brilliantly delivered by Dr. William J. Casarella, professor emeritus and former chair of radiology at Emory University. Bill was a pioneer in vascular and interventional radiology, and his talk both chronicled the history of intervention and touched on many of its pioneers from the past to the present day.

The Annual Meeting was not all work and no play—the SRS tour of Casa Loma, a replica of a medieval castle built in the early 1900s by Canadian financier Sir Henry Pellatt (see page 2, bottom right), and our cocktail reception were wonderful highlights to our week.

Help Build Our Membership!

I extend my thanks to the many SRS members in attendance and to the entire SRS membership, which now numbers 143, including 16 new members in 2015. The Section remains

Chair continues on page 2

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a dynamic group that well complements the ARRS mission. In its five-year, five-point strategic plan, ARRS includes member awareness and community, as well as personal education and mentorship, principles that are inherent in our section. The SRS seeks to provide a group-within-a-group model in which our senior members may fully partake of all the resources available.

There are, however, several hundred emeritus ARRS members who are not SRS members—and many members turn 65 years old each year.

Please consider reaching out to friends and colleagues who may qualify for membership and encourage them to join us. A new era of virtual and digital magic has become almost an extension of ourselves in our daily lives, at our Annual Meeting, and in the *AJR*. The sense of connection and comradery within the SRS creates its own magic and provides a home for emeritus, retired, or parttime radiologists within radiology's oldest professional society and at its renowned Annual Meeting.

For the ARRS 2016 Annual Meeting, we are planning an exciting tour, California-style cocktail reception, and an enjoyable guest lecture on the history of neuroradiology by Dr. Tony Hasso (UC Irvine).

May your summertime be refreshing and rewarding for you, your family, and friends. Please let me hear from you...and please make plans to attend the SRS program at the ARRS 2016 Annual Meeting April 17–22 in Los Angeles.



SRS Was Well-Represented at the ARRS 2015 Annual Meeting



Guess Who?

Who is this youngster with the rascally glint in his eyes? His identity will be revealed in the next issue of *SRS Notes*.



If you wish to submit a vintage photo to appear in an issue of *SRS Notes*, please send your photo(s) to lhurwitz@arrs.org.

Aphorisms for the Radiologist

Shortly before our colleague and friend Gil Brogdon passed away last year, he shared a collection of what he called “aphorisms for the radiologist” that he had gathered over the years. Here are some of the best:

Not even medicine can master incurable disease.

—Lucius Annaeus Seneca, *Ad Lucilium epistulae morales*

*If a man look sharply and attentively, he will see Fortune;
for though she is blind, she is not invisible.*

—Francis Bacon, *Essays of Fortune*

It is often harder to boil down than to write.

—Sir William Osler, *Aphorisms*

The investigator should have a robust faith—and yet not believe.

—Claude Bernard, *Introduction à la médecine expérimentale*

Few things are harder to put up with than the annoyance of a good example.

—Mark Twain

Did You Know?

Radiology

- The first CT took hours to acquire raw data for a single slice, and took days to reconstruct a single image from that raw data. Today, multislice CT systems can collect up to 4 slices of data in about 350 milliseconds, and reconstruct a 512- × 512-matrix image from millions of data points in less than a second!
- The Earth's atmosphere is thick enough that almost no x-rays from outer space can make it all the way to the surface.
- During the 1920s, both men and woman sought x-ray as a way to remove unwanted hair.

Wilhelm Roentgen

- He never completed high school and was kicked out of college.
- Colleagues described him as a complete scatterbrain!
- The first x-ray (or roentgenogram) was of Roentgen's wife's hand, complete with wedding ring. His wife was less than impressed and declared: “I have seen my death!”
- He left little documentation of his discoveries and experiments, and ordered that all of his scientific findings be destroyed upon his death. (Aren't we glad that didn't happen?)

Upcoming ARRS Annual Meetings

April 17–22, 2016

Los Angeles Convention Center

April 30–May 5, 2017

Hyatt Regency New Orleans

April 22–27, 2018

Marriott Wardman Park Hotel (DC)

May 5–10, 2019

Honolulu Convention Center

Welcome New Members!

We'd like to extend a hearty welcome to our newest SRS members!

John C. Hunter, MD
Sacramento, CA

Elliot Himmelfarb, MD
Brentwood, TN

Ronald D. Klizek, MD
Jamestown, NY

Thomas H. Grant, DO
Chicago, IL

SRS Birthdays

July

- 2 Wilaiporn Bhothisuw
- 3 Jonathan Dehner
- 6 David Hunter
- 9 James Scatliff
- 12 Jose Anzalotta
- 16 Dennis Heaston
- 21 Edward Goldstein, Aivars Slucis
- 22 Elizabeth Cancroft, Arthur Walter
- 23 John Campbell
- 24 Albert Yu
- 28 Neil Messenger, Leland Larson

August

- 7 Jose Freire
- 10 Robert Steele
- 11 Philip Alderson, Stover Smith
- 21 Marlen Junck
- 22 A. Everette James, J. Telle
- 23 Jaime Tisnado
- 24 Eugene Arrington
- 28 Charles Mueller

September

- 1 James Wolfsen
- 6 Peter Doris
- 9 Harry Morgan
- 11 C. Douglas Maynard
- 15 Thomas Grant, James Tallman
- 16 Howard Berman
- 22 William Sutro
- 23 Jerry Phillips
- 24 James Peters, Lee Rogers
- 26 James Taverna

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- \$250 or more—I will receive the Insulated Travel Tumbler, the Smart Phone Universal Clip Lens Kit, and a Compact, High Capacity, DoubleShot Power Bank Battery Charger as my free gifts for supporting the 2015 campaign.

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