SPECIAL ARTICLE

Winners of the 2011 American College of Rheumatology Annual Image Competition

American College of Rheumatology Audiovisual Aids Subcommittee

The American College of Rheumatology Audiovisual Aids Subcommittee is pleased to present the winners of the 2011 Annual Image Competition. Each year, the competition provides an opportunity for clinicians and other medical and research professionals to contribute to one of the preeminent image collections devoted to rheumatic disease. For the 2011 competition, the Subcommittee received more than 150 entries; selecting the best was a difficult but pleasurable task. Each submitted image was evaluated not only for a competition prize, but also for inclusion in the Rheumatology Image Bank.

The overall winning image in the 2011 competition was a composite of a juvenile patient with scleroderma (Figure 1). A depiction of positron emission tomography–computed tomography scanning of the index finger in psoriatic arthritis was the winner in the still image category (Figure 2). In the case study category, a composite of sonographic findings in calcium pyrophosphate dihydrate deposition disease was the winner (Figure 3).

Honorable mention was awarded to images depicting tumor necrosis factor receptor–associated periodic syndrome: periorbital edema (submitted by Uri Arad, MD), the Steinberg (thumb) sign (submitted by David Armstrong, MD), Gardner syndrome: multiple osteomas of the skull (submitted by Sandra Guignard, MD), Raynaud’s phenomenon (submitted by Garnetta Ely, MD), calcinosis cutis in dermatomyositis (submitted by Shen Guang Li, MD), arthropathy of familial hypercholesterolemia (submitted by Shen Guang Li, MD), scleromyxedema (submitted by Sahai Mrisa, MD), systemic sclerosis: calcinosis cutis (submitted by Catarina Favas, MD), tophi in pancreatic pseudocyst and colon (submitted by Mukta Sharma, MD), and complex regional pain syndrome: diffuse osteopenia (submitted by Sophia Li, MD).

The winning images from the 2011 competition, as well as several other outstanding images that were submitted, will be added to the ACR Rheumatology Image Bank. The Rheumatology Image Bank provides the medical community with 24/7 online access to the world’s foremost collection of rheumatology images. This collection, formerly known as the ACR Clinical Slide Collection on Rheumatic Diseases, features contributions from all over the world and is an invaluable resource for countless physicians and other health professionals, researchers, and journalists. Since its launch at the 2009 ACR/ARHP Annual Scientific Meeting, the Rheumatology Image Bank has received over 415,000 unique visitors worldwide including 11,500 registered users, with both numbers continuing to increase steadily. The Rheumatology Image Bank may be viewed at http://images.rheumatology.org.

The ACR encourages the continued submission of high-quality images to the annual image competition. The Audiovisual Aids Subcommittee is targeting particular images to enhance the image bank. If you have high-quality images that illustrate rheumatic conditions or are relevant to the practice of rheumatology, please submit them to the 2012 Image Competition. The call for submissions for the 2012 competition will open on Friday, June 1, and the submission deadline is Monday, September 3.

If you have any questions regarding the image competition, please contact products@rheumatology.org.

Members of the Audiovisual Aids Subcommittee of the American College of Rheumatology Committee on Education: Brian E. Daikh, MD, Portland, Maine (Chair); Alan N. Baer, MD, Baltimore, Maryland; Eric P. Gall, MD, Tucson, Arizona; Kristine M. Lohr, MD, Lexington, Kentucky; Janet Maynard, MD, Baltimore, Maryland; Erika H. Noss, MD, Boston, Massachusetts; Kathleen M. O’Neil, MD, Oklahoma City, Oklahoma; Andrea Ramirez, MD, Phoenix, Arizona; Lee Anderson, RN, BSN, Champlin, Minnesota (Association of Rheumatology Health Professionals [ARHP] representative); Nancy Baker, ScD, OTR/L, Pittsburgh, Pennsylvania (ARHP representative); Iris Davidson, BSR, Vancouver, British Columbia, Canada (ARHP representative).

Submitted for publication January 30, 2012; accepted January 30, 2012.
Figure 1. Pediatric scleroderma (composite). The patient is a 16-year-old boy with limited scleroderma (en-coup de sabre and truncal morphea) and Parry-Romberg syndrome with hemifacial atrophy and enophthalmos. Submitted by Ashima Makol, MD, Rochester, MN.

Figure 2. Positron emission tomography–computed tomography (PET-CT) imaging of the index finger in psoriatic arthritis. Inflammation of the extensor tendon, nail bed, synovium, and soft tissue in the index finger of a 52-year-old man with psoriatic arthritis can be visualized and quantified from high-resolution PET-CT. Images were acquired using a custom-built extremity PET-CT scanner. Representative sections from CT (top), 18F-fluorodeoxyglucose–based PET (bottom), and their fusion (center) are shown. Submitted by Abhijit Chaudhari, MS, PhD, Sacramento, CA and Siba P. Raychaudhuri, MD, Davis, CA.

Figure 3. Sonographic findings in calcium pyrophosphate dihydrate (CPPD) crystal deposition disease. These images show ultrasonographic patterns of CPPD crystal deposition in symptomatic joints of a 50-year-old woman with a 3-year history of episodic acute arthritis. The diagnosis of CPPD arthropathy was confirmed on the basis of CPPD crystals found in a knee aspirate and chondrocalcinosis seen on plain radiography (A[i], B[i], and C[i]) (arrows). Of note, serum uric acid levels were normal and the patient did not have risk factors for gout. The ultrasound images show 3 different sonographic patterns of CPPD crystal deposition in hyaline cartilage: 1) the “double contour” pattern of hyperechoic enhancement of the articular surface of the hyaline cartilage of the shoulder (A[ii]) (arrows); 2) a thick band of calcification extending from the cartilage surface to deep layers of the hyaline cartilage of the elbow (B[ii] and B[iii]) (arrow); and 3) the classic mid-substance calcification seen as hyperechoic deposits within the hyaline cartilage of the shoulder and knee (A[iii], C[ii], and C[iii]) (arrows). Submitted by Surabhi Waghmare, MRCP, Lisburn, Northern Ireland, UK.