SPECIAL ARTICLE

Winners of the 2012 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 2012 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 diseases. For the 2012 competition, more than 200 entries were received. The selection process was a difficult but enjoyable task for the Subcommittee. Each submitted image was evaluated not only for a competition prize, but also for inclusion in the Rheumatology Image Bank.

The 2012 grand prize competition winner was a 3-dimensional computed tomographic angiography image of the neck of a female patient with Takayasu arteritis (Figure 1). A composite showing echocardiographic findings in a patient with Libman-Sacks endocarditis was the winner in the still image category (Figure 2). A composite illustrating acute calcific periartthritis in the wrist was the winner in the case study category (Figure 3). The winner of the new health professionals’ category was a composite of images depicting devices used to assist a patient with scleroderma affecting the hands (Figure 4).

Honorable mention was awarded to images depicting arc of Riolan (submitted by Helga Garcia-Ferrer, MD), granulomatosis with polyangiitis (submitted by Nezam Altorok, MD), systemic lupus erythematosus and melena (submitted by Namrata Singh, MD), gout: ankle tendons and tendon sheaths (submitted by Aishwarya Sukhdeo, MD), chronic recurrent multifocal osteomyelitis (submitted by Heather Hanson, MD), temporomandibular joint arthritis (submitted by Randy Cron, MD), sarcoidosis: hands (submitted by Nezam Altorok, MD), systemic lupus erythematosus and osteonecrosis (submitted by Alexandros Drosos, MD), systemic sclerosis: intraarticular calcification (submitted by Michael Hughes, MD), lupus mastitis (submitted by Mayur Patel, MD), and gluteus medius tear (submitted by Aimee Wiener, ARNP C, MSN).

The winning images of the 2012 competition, as well as several additional outstanding images that were submitted, will be added to the ACR Rheumatology Image Bank. The ACR’s Rheumatology Image Bank provides the medical community with 24/7 online access to the world’s foremost collection of rheumatology images. This collection features contributions from all over the world and is an invaluable resource for countless physicians and other health care professionals, researchers, and journalists. Since its launch in 2009, the Rheumatology Image Bank has received over one million unique visitors worldwide. To view the winning images and many more, visit the Rheumatology Image Bank at http://images.rheumatology.org.

The ACR encourages the continued submission of high-quality images to its 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 2013 Image Competition. Go to http://images.rheumatology.org for competition rules and entry information.

If you have any questions regarding the image competition, please contact products@rheumatology.org.
Figure 1. Takayasu arteritis: computed tomographic angiography of the neck (3-dimensional image). Computed tomographic angiography was performed in a 36-year-old woman who had a lump on the left side of the neck and no other symptoms. The study revealed aneurysmal dilatation of the mid- and distal left common carotid artery. The neck lump had appeared 3–4 weeks before the computed tomographic angiography was performed, and neck ultrasound performed at that time showed a carotid artery aneurysm. The patient had an elevated erythrocyte sedimentation rate and diminished left radial pulse. She underwent subsequent computed tomographic angiography of the chest, abdomen, and pelvis, which revealed diffuse thickening of the subclavian artery and aorta consistent with Takayasu arteritis. She was subsequently treated with corticosteroids and methotrexate. Submitted by Jatin Patel, MD, Philadelphia, PA.

Figure 2. Libman-Sacks endocarditis (composite). A previously healthy 37-year-old woman presented with slurred speech, left facial droop, and weakness of the left hand. Magnetic resonance imaging of the brain showed an acute nonhemorrhagic right middle cerebral artery infarct. The echocardiographic studies shown here revealed 1-cm echodensities on the tip of the anterior and posterior mitral valve leaflets. Based on the presence of antinuclear antibodies, lupus anticoagulant, and antibodies to double-stranded DNA, cardiolipin, and β2-glycoprotein I, systemic lupus erythematosus with Libman-Sacks endocarditis and antiphospholipid syndrome was diagnosed. The patient was treated with low molecular weight heparin and transitioned to warfarin for lifelong anticoagulation therapy. The neurologic symptoms resolved completely after 4 weeks of treatment. Submitted by Sonialy Lugo Ruiz, MD, St. Louis, MO.

Figure 3. Acute calcific periarthritis: wrist. A 37-year-old woman with a history of remote trauma to the right first dorsal wrist extensors and a right triangular fibrocartilage complex tear presented with acute pain, erythema, and swelling around the first wrist extensor tendons (upper right image). Lateral longitudinal ultrasound of the first dorsal wrist extensor compartment obtained on a Sonosite M-MSK with a 25-mm broadband linear array transducer and 13–6 MHz bandwidth demonstrated amorphous, rounded hyperechoic densities consistent with calcifications within the tendon sheath (lower right image). Radiography of the right wrist 1 week after the acute flare showed an area of faint calcification lateral to the distal radius in the vicinity of the first dorsal compartment (left image). Note the punctate calcification distal to the ulnar styloid, stemming from the prior triangular fibrocartilage complex injury. Given the acute monoarticular pain and inflammation in the wrist associated with ultrasound and radiographic findings of calcifications, acute calcific periarthritis of the wrist was diagnosed. The patient was treated with a short course of prednisone in a tapering dose over 3 days, with rapid improvement of the symptoms. Submitted by Naina Rastalsky, MD, Boston, MA.

Figure 4. Assistive devices for hand deformities in scleroderma. A, Sclerodactyly, digital ulceration, and gangrene in a patient with scleroderma. The use of assistive devices helps to foster functional independence in activities of daily living and work tasks in patients with these complications. B, Finger splints to enable use of a computer keyboard. C, Key holder with orthotic built-up handle. D, Enlarged grip, as a writing aid. Submitted by Veronica De Cillis, OT, Buenos Aires, Argentina.