

possible care to their patients.” The Society provides education to physicians and patients, represents the values of the medical profession and promotes enlightened public policy in the field of health care.

There are a series of planned commemorative events through the year including a series of public lectures on “Neuroscience and Society”. The series will draw upon recent discoveries in the biology of the human brain, which is transforming fields as diverse as medicine, criminal justice, philosophy and theology. A Presidential lecture series is also underway, focusing on contemporary topics in the practice of medicine. There will be a grand celebration on April 21st 2012 in Newport Rhode Island. Please join your friends and colleagues and celebrate the history of medicine in Rhode Island.

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The author and/or their spouse/significant other do not have financial interest to disclose.

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## **Introduction: Arthritis and Joint Replacement – The Upper Extremities**

*Theodore A. Blaine, MD*

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**ARTHRITIS IS THE MOST COMMON MUSCULOSKELETAL JOINT CONDITION**, affecting over 27 million Americans. Although it is most commonly seen in the hip and knee, arthritis also frequently affects the upper extremities (shoulder, elbow, wrist and hand) and spine. The shoulder accounts for 30 percent of all patients presenting with chronic joint pain, and it is the third most common large joint to require surgical reconstruction, after the knee and the hip.

The most common types of arthritis include osteoarthritis, rheumatoid arthritis and other inflammatory arthropathies. However, arthritis may also occur as a secondary process after trauma, infection, or avascular necrosis. Patients with arthritis typically present with pain, loss of motion, and mechanical symptoms such as catching and locking. Radiographic features of osteoarthritis include sclerosis, subchondral cyst formation, loss of joint space and architecture, and osteophyte formation.

Standard non-operative treatment measures for arthritis include oral medications (nonsteroidal anti-inflammatories, acetaminophen, narcotic pain medications), injectable medications (corticosteroids, methotrexate, etc.) and physical therapy. When these treatments fail, joint replacement is a successful option for these patients.

Joint replacement surgery in the upper extremity has increased dramatically in numbers and variety of procedures available in the past decade. From 1998 to 2008 there was a 2.5 times increase (from 19,000 to 47,000) in the number of shoulder arthroplasties performed in the United States. With the advancing age of the population, and with new materials and technologies available, joint replacement is expected to continue its increase in the next decade and beyond.

In this issue of *Medicine & Health/Rhode Island*, we present articles on the most current treatment alternatives available for arthritis affecting the upper extremities and cervical spine. The most common joint replacement procedures are described, and some of the newer cutting-edge replacement procedures are presented. Many of these procedures were designed, developed, or advanced by our own physicians and orthopedic surgeons in Rhode Island. It is hoped that the dissemination of this information will benefit the patients and physicians of Rhode Island by sharing the many successful joint replacement procedures available to them in the treatment of arthritis.

*Dr. Theodore Blaine was formerly Associate Professor of Orthopaedic Surgery at the Warren Alpert Medical School of Brown University. Currently, he is Chief of Shoulder and Elbow Surgery at Yale Orthopaedics and Rehabilitation and Associate Professor of Orthopaedic Surgery at the Yale School of Medicine.*

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