Arthroscopy is a surgical procedure that allows a surgeon to look inside a joint using small cuts with instruments the width of a pencil. Most people are aware of knee and shoulder arthroscopy, but the elbow joint has many conditions that can be treated with this procedure as well.

The elbow is the joint that connects the upper arm bone and the forearm bones (Figure 1). Because the cuts used with elbow arthroscopy are smaller and disrupt less soft tissue than conventional open surgery, pain, swelling and stiffness are minimized, and recovery is often faster.

When is elbow arthroscopy performed?
There are a variety of conditions for which elbow arthroscopy can be useful in diagnosis as well as treatment, including:

- Arthritis
- Loose bodies in the joint
- Tennis elbow
- Stiffness
- Fractures

Fractures and other injuries to the elbow can lead to significant stiffness of the joint. Stiff, contracted elbows are being released more frequently by elbow arthroscopy. Although not curable by arthroscopy, patients with arthritis of the elbow can enjoy significant improvement in symptoms and function after arthroscopy. After physical examination, including x-rays or other studies such as CT or MRI scanning, your surgeon may recommend an arthroscopic procedure for treatment of your elbow disorder.

How is elbow arthroscopy performed?
The procedure is performed under general or regional anesthesia. A fiberoptic camera is inserted through a small cut in the elbow. The camera lens magnifies and projects the small structures in the elbow onto a television monitor, allowing the surgeon to accurately diagnose the condition. Several other small cuts in the elbow allow the surgeon to place the camera in different positions to see different structures inside the joint and to place various small instruments into the joint to help treat various problems (Figure 2).

Recovery
After your arthroscopy, you may be placed into an elbow splint that still allows you to use your hand. The amount of time in the splint will vary depending on what was performed at the time of surgery. Elevating the arm is important to prevent excessive swelling and pain after your surgery. Certain conditions require that you begin therapy right away, and others may not require it at all. This procedure often allows the patient to go home the same day, but occasionally, depending on the condition, a hospital stay may be needed.

Risks and limitations
As with any surgery, elbow arthroscopy has risks. These include infection and potential damage to nerves and arteries. Stiffness may need to be addressed through rehabilitation. Elbow arthroscopy is not appropriate for all elbow conditions and is dependent on the surgeon’s training, expertise and comfort level.