**Back Pain**

**Overview:** If you suffer from low back pain you are not alone. It is estimated, at any given time approximately 15% of all Americans have recurrent low back pain. By definition acute low back pain is severe, sudden in onset and short term. Chronic low back pain lasts longer than six months. Low back pain can be disabling, by not allowing sufferers to sleep, enjoy recreational activities, to take care of the household or go to work.

**Diagnosis:** About 90% of all low back pain is because of poor body mechanics. This may contribute to or be a result of arthritis, muscle tears or ligament strains. However, 10% of the time low back pain may indicate a serious underlying medical problem such as an infection or severe inflammatory arthritis. The most important factor in determining the diagnosis is the history and physical. Low back pain coming from a problem with the lumbar spine tends to be sudden in onset, worse during the day when we are weight bearing and relieved when we lay down. The serious medical causes of low back pain tend to be more gradual in onset, develop slowly and are usually worse during the night.

Ninety percent of the time back pain will go away on its own with education, mild pain relievers and a little bit of rest. When back pain is severe and chronic, the diagnostic tests are not always revealing. We are not always sure why the back is hurting despite the use of today's best technology.

There are four structures in the back that cause pain: nerves, muscles, ligaments and joints. The Pain Management Center uses diagnostic injections to determine the cause of pain. When the physician does an injection, the following may occur: 1.) The patient may get good long-term relief, in which case the problem is identified and solved. 2.) The patient may get short-term relief, in which case a diagnosis is made. 3.) The patient may receive no relief, in which case the next structure is injected. Up to four injections are made into the different structures until a diagnosis can be determined.

**Treatment:** Is determined by the duration of the back pain and the diagnosis.

**Acute Onset:** In the event of acute onset of low back pain, the best therapy is rest for 48 hours along with anti-inflammatory medicine such as Motrin. It is important to note lying or sleeping position and to take pressure off the strained back muscles. Lumbar pillows are beneficial and help keep the back in neutral alignment, thereby relieving pressure. After the 48-hour period, gradually resume normal activities. Some residual discomfort may persist, but should subside. Oral medications should only be used for short periods as they can lead to high blood pressure, kidney or liver problems and ulcers in the stomach or small intestine. Usually within four weeks 90% of patients with low back pain will improve to the point where they have minimal or no discomfort. Proper posture and strength training can help reduce further incidence.

**Persistent Discomfort:** If you have persistent discomfort, see your doctor. He/She may initiate an examination or diagnostic tests to rule out a medical cause for low back pain.
Chronic: The pain doctor may inject one of the four structures to determine a diagnosis. Physical therapy may be used concurrently or as a follow-up to help reduce or prevent further pain. Physical therapy focuses on body alignment, mechanics and awareness, as well as flexibility and exercise.

Oral medications should only be used for short periods as they can lead to high blood pressure, kidney or liver problems and ulcers in the stomach or small intestine.

It is important to note lying or sleeping position in order to take pressure off the strained back muscles. Lumbar pillows are beneficial and help keep the back in neutral alignment, thereby relieving pressure.

Prevention: To help prevent back pain:
Note sleep posture, consider a lumbar support pillow
Maintain an ideal body weight
Maintain proper posture for all daily activities (e.g.) walking, sitting or driving
Do proper strength training
Do proper flexibility training
Avoid smoking
Reduce stress
Overview: Certain areas of the musculoskeletal system experience significant stress from everyday living. The shoulders, hips and the area on which we sit are subject to mechanical pressure. Fluid filled sacs, called bursas, help reduce the pressure by spreading it evenly, in the same way a waterbed works when we lay on it. Unfortunately, the bursas can wear out and become inflamed and irritated. The most common sites for this to occur are the hips and shoulders. This probably happens during our sleep when we lay on our sides. Less often, the elbows and buttocks develop bursitis.

Diagnosis: The patient with bursitis will complain of well-localized pain in the shoulder, hips or buttocks. The pain may travel from one of these areas into the arm or thigh. When the doctor examines the patient, he or she will look for swelling and tenderness over the locations of the bursa. To confirm the diagnosis an X-ray may be taken. In advanced bursitis, calcium is deposited and viewed by a traditional X-ray. The bulk of bursa inflammation occurs in the soft tissue, which cannot be seen on X-ray. Therefore, the diagnosis is usually established on the basis of a physical exam.

Treatment: There are many remedies for bursitis. In the early stages, aspirin or an anti-inflammatory drug will frequently cure the problem. Ice should also be applied over the inflamed area for at least an hour per day. Ice may have to be used for up to a week to gradually reduce the inflammation. It is important to rest the affected area. If the right hip is affected, try to sleep on the left side. If these treatment strategies fail to work, the doctor may inject an anti-inflammatory drug directly into the bursa. These drugs are steroids or cortisone type compounds and are very useful for the relief of inflammation. One problem with these drugs is they have significant side effects and should be used only a few times a year. If ice, oral medications, rest and injections fail to resolve the bursitis, physical therapy can then be used. The physical therapist may use ultrasound and soft tissue manipulation that can sometimes be helpful. Waterbeds help reduce pressure on bursas during sleep. If none of these interventions help, the bursa can be surgically removed. However, this is rarely required and symptoms can persist even after surgical removal.