If you have muscle skeletal disorder, you are Not Alone. Nearly everyone at some point has muscle skeletal disorder that interferes with work, routine daily activities, or recreation.

Acute muscle spasm: generally lasts from a few days to a few weeks. It is mostly mechanical in nature — the result of trauma or a disorder such as arthritis.

Chronic muscle spasm: is measured by duration — pain that persists for more than 3 months is considered chronic

Types of Musculoskeletal Disorders

JOINT PAIN BACK PAIN SPORTS INJURIES SPRAINS & STRAINS -<u>Tension headache</u> -<u>Stiff neck or cervical sprain</u> - <u>Charley horse</u> - <u>Muscle cramps</u>

Back Pain

Acute low back pain generally lasts from a few days to a few weeks. Most acute back pain is mechanical in nature — the result of trauma to the lower back or a disorder such as arthritis. Pain from trauma may be caused by a sports injury, work around the house or in the garden, or a sudden jolt such as a car accident or other stress on spinal bones and tissues.

Symptoms may range from muscle ache to shooting or stabbing pain, limited flexibility and/or range of motion, or an inability to stand straight. Occasionally, pain felt in one part of the body may "radiate" from a disorder or injury elsewhere in the body. Some acute pain syndromes can become more serious if left untreated.

Chronic back pain is measured by duration — pain that persists for more than 3 months is considered chronic. It is often progressive and the cause can be difficult to determine.

Causes

As people age, bone strength and muscle elasticity and tone tend to decrease.. <u>More ></u>

Diagnosis

A thorough medical history and physical exam can usually identify any dangerous conditions or family history that may be associated with the pain.More >

Treatment

Most low back pain can be treated without surgery. Treatment involves using analgesics, restoring proper function and strength to the back, and preventing recurrence of the injury. More >



As people age, bone strength and muscle elasticity and tone tend to decrease..

- The exact cause of the back pain is often unknown. The pain can come on after lifting things, or overuse or it may come on without previous exercise or training.
 - However in about 25% of cases, patients suffer from conditions like slipped disc, osteoporosis (brittle bones), deformation of natural spine curvature (scoliosis) or more rarely, skeletal damage due to tumors or infection

Treatment

Most low back pain can be treated without surgery. Treatment involves using muscle relaxtants, analgesics, restoring proper function and strength to the back, and preventing recurrence of the injury.

The use of cold compresses: have never been scientifically proven to quickly resolve low back injury, compresses may help reduce pain and inflammation and allow greater mobility for some individuals. As soon as possible following trauma, patients should apply a cold pack or a cold compress. After 2 to 3 days of cold treatment, they should then apply heat (such as a heating lamp or hot pad) for brief periods to relax muscles and increase blood flow. Warm baths may also help relax muscles.

Bed rest: 1–2 days at most on a firm, flat surface

Exercise Activity is beneficial. Stay active within the limits of pain.

Avoid stooping, bending, lifting and sitting on low chairs

Medications (Parafon) are often used to treat acute and chronic low back pain

Cervical (Neck) Pain

- The cervical spine is a complex structure.
 It is capable of supporting a head weighing 15 or more pounds while moving in several directions.
- •No other region of the spine has such freedom of movement.
- •This combination however, complexity and mobility, make the neck susceptible to pain and injury.
- •Muscular tightness or spasm in the muscles in, and around your neck causes pain.







- Injury and Accidents.
- Old Age: Degenerative disorders such as osteoarthritis, spinal stenosis, & degenerative disc disease are known to affect the spine.
- Other Diseases: such as spinal infection, spinal cord compression, tumor, fracture,
- <u>Everyday Life</u>: poor posture, obesity, & weak abdominal muscles disrupt the spine's balance often causing the neck to bend forward to compensate. Stress & emotional tension can cause muscles to tighten & contract resulting in pain and stiffness.



Treatment:

- Frequent breaks for a few seconds every hour to change position. Stretch and move stiff areas of your neck and shoulders.
- Keep heavy loads and things you lift close to you while lifting them.
- Lift with your legs instead of your back.
- Avoid reaching overhead with your arms and too far from your body.
- Avoid moving your neck up or down a lot.
- Alternating heat (not used in the first week) & cold to help relieve muscle spasms. Rest the neck by wearing a soft, supportive collar.
- Gently massaging the area.
- Anti-inflammatory & muscle relaxant medications
- Exercises for flexibility, strength, and stability should be started when the severe pain & spasm symptoms vanish.

Torticollis

- Torticollis (wry neck) is a congenital or acquired
- condition of limited neck motion in which the child will
- hold the head to one side with the chin pointing to the
- opposite side. It is the result of the shortening of the
- neck (sternocleidomastoid) muscle. In early infancy, a
- firm, non-tender mass may be felt in the midportion of
- the muscle. The mass will go away and be replaced with
- fibrous tissue. If untreated, there can be permanent
- limitation of neck movement. There may be flattening of
- the head and face on the affected side.





Arthrosis

•Osteoarthrosis is a degenerative condition of the joints.

- •This process is accompanied by a release of enzymes that usually are inside the cartilaginous cells, these enzymes cause a local inflammatory response, which enhances the tissue lesion.
- Erosions appear on the articular surface of the cartilage. Accordingly every element of the joint undergoes hypertrophy.



•Prior to pain, osteoarthritis patients may complain about articular discomfort or discomfort around the joints, and tiredness. Subsequently, pain appears, followed, later, by deformities and restriction of the articular function. In the beginning, pain emerges after a prolonged use of the compromised joints or strain on these.

•Afterwards, patients complain that following a long period of inactivity, such as sleeping or prolonged sitting, in cases of hip or knee osteoarthritis, pain is experienced in the beginning of the motion, remaining for a few minutes.

•Treatment usually begins when the joint first becomes painful.

•Reducing the activity, or changing from occupations that require heavy repetitive hand and finger motions, may be necessary to help control the symptoms.

This may only occur with heavy use and ma require <u>mild anti-inflammatory</u> medications,
such as aspirin or ibuprofen.



Sprains & Strains



Sprain: A sprain is a stretching or tearing of ligaments. Ligaments are tough bands of fibrous tissue that connect one bone to another. They help to stabilize joints, preventing excessive movement. Sprains are frequently caused by rapid changes in direction or by a collision. Common locations for sprains are your ankles and knees.

Strain: A strain is a stretching or tearing of muscle. This type of injury often occurs when muscles suddenly and powerfully contract or when a muscle stretches unusually far. People commonly call muscle strains pulled muscles. Hamstring injuries are among the most common strains.



Vary according to the severity of the injury

Sprain:

Sprains can cause rapid swelling. Generally, the greater the pain and swelling, the more severe the injury.

Strain:

Mild: Pain and stiffness that occur with movement and may last a few days.

<u>Moderate</u>: Partial muscle tears result in more extensive pain, swelling and bruising. The pain may last one to three weeks. <u>Severe:</u> The muscle is torn apart or ruptured. Significant bleeding, swelling and bruising around the muscle. Muscle may not function at all, and surgical repair may be needed.

Treatment:

•Treating a sprain or strain depends on the severity of the injury. For mild sprains and strains, the doctor likely will recommend basic self-care measures and an over-the-counter pain reliever such as ibuprofen or acetaminophen in combination with muscle relaxants

 In cases of a mild or moderate sprain or strain, ice applied to the area as soon as possible to minimize swelling. In cases of severe sprain or strain, immobilization of the area with a brace or splint. Rarely, surgery may be considered.

Tension Headache



•This most common type of headache is caused by severe muscle contractions triggered by stress or exertion. It affects as many as 90% of adult Americans, women and people with more education are slightly more likely to suffer with them.

•People who are so anxious that they grind their teeth or hunch their shoulders may find that the physical strain in their body can be experienced as pain and tension in the muscles of the neck and scalp, producing almost constant pain.



- Emotional stress is the leading trigger of tension headaches, particularly among chronic sufferers.
- Eyestrain caused by dealing with a large amount of paperwork or reading can cause a tension headache as well.
- Tightening in the muscles of the face, neck and scalp because of stress or poor posture. The tightening muscles cause more constriction of blood vessels, which can make head pain worse.
- Lack of sleep is also a common contributor to tension headaches.

Symptoms



- A dull, constant, steady, non-throbbing pain, usually on both sides of the head is common
- Pain felt on both sides of the head, in the forehead, temples, and the back of the head
- Pressure may feel like a tight band around the head
- Intensity that ranges from mild to severe and can vary during the day
- Tightness in head and neck muscles
- Difficulty concentrating

•Tension headaches may be effectively treated with overthe-counter (OTC) pain medication as well as nonmedicinal therapies. An extensive listing of such therapies is listed under the "headache treatment" section. If chronic tension headaches occur everyday or almost everyday, it is important that you consult a physician immediately

•Tension headaches usually respond very well to such over-the-counter medicines as *aspirin*, *ibuprofen*, or *acetaminophen*.

•More severe tension headaches may require combination medications with *muscle relaxants*