

Fact Sheet:

Orthopaedics

Orthopaedics is the medical specialty that focuses on injuries and diseases of your body's musculoskeletal system. This complex system includes your bones, joints, ligaments, tendons, muscles, and nerves and allows you to move, work, and be active.



Once devoted to the care of children with spine and limb deformities, orthopaedists now care for patients of all ages, from newborns with clubfeet to young athletes requiring arthroscopic surgery to older people with arthritis. And anybody can break a bone.

Your Orthopaedic Surgeon

Orthopaedic surgeons manage special problems of the musculoskeletal system. This involves:

- **Diagnosis** of your injury or disorder
- **Treatment** with medication, exercise, surgery or other treatment plans
- **Rehabilitation** by recommending exercises or physical therapy to restore movement, strength and function
- **Prevention** with information and treatment plans to prevent injury or slow the progression of diseases

While orthopaedic surgeons are familiar with all aspects of the musculoskeletal system, many orthopaedists specialize in certain areas, such as the foot and ankle, spine, hip or knee. They may also choose to focus on specific fields like pediatrics, trauma or sports medicine. Some orthopaedic surgeons may specialize in several areas.

Education and Training

Your orthopaedic surgeon is a medical doctor with extensive training in the proper diagnosis and treatment of injuries and diseases of the musculoskeletal system. Your orthopaedic surgeons completed up to 14 years of formal education.

- Four years of study in a college or university
- Four years of study in medical school
- Five years of study in orthopaedic residency at a major medical center
- One optional year of specialized education

After establishing a licensed practice, your orthopaedic surgeon demonstrated mastery of orthopaedic knowledge by passing both oral and written examinations given by the American Board of Orthopaedic Surgery.

Each year your orthopaedic surgeon spends many hours studying and attending continuing medical education courses to stay up-to-date in current orthopaedic knowledge and skills.

Treatment

Orthopaedic surgeons treat many musculoskeletal conditions without surgery, by using medication, exercise and other rehabilitative or alternative therapies. For most orthopaedic diseases and injuries there is more than one form of treatment. If necessary, he/she may also recommend surgery if you do not respond to other treatments.

Your Doctor's Visit

Your visit will start with a personal interview and physical examination. This may be followed by diagnostic tests such as blood tests, X-rays, or other tests.

Your orthopaedic surgeon will discuss your diagnosis and available treatment options with you and help you select the best plan to help you to live an active and functional life.

Surgical Treatment

Orthopaedic surgeons perform numerous types of surgeries. Common procedures include:

- **Arthroscopy** – a procedure using special cameras and equipment to visualize, diagnose and treat problems inside a joint.
- **Fusion** – a “welding” process by which bones are fused together with bone grafts and internal devices (such as metal rods) to heal into a single solid bone.
- **Internal Fixation** – a method to hold the broken pieces of bone in proper position with metal plates, pins or screws while the bone is healing.
- **Joint Replacement (partial, total and revision)** – when an arthritic or damaged joint is removed and replaced with an artificial joint called a prosthesis.
- **Osteotomy** – the correction of bone deformity by cutting and repositioning the bone.
- **Soft tissue repair** – the mending of soft tissue, such as torn tendons or ligaments.