



PATIENT FACT SHEET

Joint Injections (Joint Aspirations)



WHAT IS IT?

Joint injections or aspirations are used to pull fluid out of a joint. They are performed in an office or hospital setting, often with a cold spray or other local anesthesia. After the skin surface is thoroughly cleaned, the joint is entered with a needle attached to a syringe. At this point, either joint fluid can be obtained [aspirated] and used for appropriate laboratory testing or medications can be injected into the joint space. This technique also applies

to injections into a bursa or tendon sheath to treat bursitis and tendonitis, respectively. Commonly injected joints include the knee, shoulder, ankle, elbow, wrist, base of the thumb and small joints of the hands and feet. Hip joint injection may require the aid of an ultrasound or X-ray called fluoroscopy for guidance. Some small joints may also be more easily aspirated or injected with aid of ultrasound.



BENEFITS

Joint aspiration usually is done for help with diagnosis or treatment. Fluid obtained from a joint aspiration can be examined by the physician or sent for laboratory analysis, which may include a cell count (the number of white or red blood cells), crystal analysis (to confirm the presence of gout or calcium pyrophosphate crystal disease), and/or culture (to determine if an infection

is present inside the joint). Drainage of a large joint effusion can provide pain relief and improved mobility. Joint injections may decrease the accumulation of fluid and cells in the joint and may temporarily decrease pain and stiffness. They may be given to treat inflammatory joint conditions, such as rheumatoid arthritis, psoriatic arthritis, gout, tendonitis, bursitis and, also, osteoarthritis.



WHAT IS INJECTED?

Corticosteroids (such as methylprednisolone and triamcinolone formulated to stay primarily in the joint) frequently are used. They are anti-inflammatory agents that slow down the accumulation of cells responsible for producing inflammation and pain within the joint

space. Although corticosteroids may also be successfully used in osteoarthritis, their mode of action is less clear. Hyaluronic acids (Hyalgan®, Synvisc®, Orthovisc®) are viscous substances that may relieve the symptoms of osteoarthritis of the knee for periods up to 6-12 months. Modes of action are not clear.



WHAT ARE THE RISKS?

Occasional side effects include allergic reactions to the medicines injected into joints, to tape or the disinfectant used to clean the skin. Infections are extremely rare complications of joint injections and occur less than 1 time per 15,000 corticosteroid injections. Another uncommon complication is post-injection flare— joint swelling and pain several hours after the corticosteroid or hyaluronic acid injection—which occurs in approximately 1 out of 50 patients and usually subsides within several days. It is not known if joint damage may be related to too-frequent corticosteroid

injections. Generally, repeated and numerous injections into the same joint/site should be discouraged. Other complications, though infrequent, include depigmentation (a whitening of the skin), local fat atrophy (thinning of the skin) at the injection site and rupture of a tendon located in the path of the injection. Joint injections also should not be given if an infection is present inside or around a joint and if someone has a serious allergy to one or more of the medications that are injected into a joint. If an infection is suspected, aspirating the joint to gather cultures is essential.

Reviewed June 2018 by Elizabeth Roth-Wojcicki, RN, MS APNR, and reviewed by the American College of Rheumatology Communications and Marketing Committee. This patient information is provided for general education only. Individuals should consult a qualified health care provider for professional medical advice, diagnosis and treatment of a medical or health condition.