Q: I have sharp pain in my knee. What can I do to treat it?

A: Too often, many of us dismiss joint pain as an unavoidable part of aging. However, it is something that should be addressed. If ignored, joint pain can worsen and lead to serious complications later in life. When identified early, you can better manage joint pain and potentially avoid the long-term effects of leaving it untreated.

Sharp pains in one location near the joint can be an early warning sign of a bone marrow lesion. Such lesions are microfractures that cause swelling in bone marrow. As the swelling increases, pressure builds within the bone, causing the bone to become weakened, defective, or hollowed out. This causes decreased support for the joint cartilage.

Some risk factors associated with the development of bone marrow lesions include:

- Obesity.
- Joint malalignment, otherwise known as bowleggedness or knock knees.
- Increasing activity too quickly, such as jumping into an exercise program too fast.
- Injuries.
- Poor diet.
Bone marrow lesions do not support the cartilage around the affected joint, thinning it and wearing it down over time. If left untreated, that can lead to arthritis and may require surgery to repair the joint. Therefore, it is important to talk with your doctor about any joint pain you experience.

In less severe cases, bone marrow lesions can be treated without surgery by using crutches, braces and anti-inflammatory medication. If the affected area does not heal on its own, your physician may recommend a procedure known as subchondroplasty to treat the bone marrow lesion.

A minimally invasive procedure, subchondroplasty fills bone defects with injected calcium phosphate, stabilizing the fracture. Calcium phosphate is a chemical compound used to help strengthen the bone. This decreases pain and swelling and allows bone pressure to normalize. Over time, the calcium phosphate will fill the fractures in the bone and will dissolve when replaced by new bone.

Subchondroplasty is an outpatient procedure, so patients can return home the same day after surgery. After the procedure, your physician may recommend physical therapy, as well as using crutches, as the bone heals.

You can prevent bone marrow lesions by maintaining a healthy diet and weight. Bone marrow lesions can occur from injury, so it is important to properly warm up before exercise and activity and consult your doctor to review knee precautions when starting an exercise program.

If you suffer from symptomatic joint malalignment, such as bowleggedness or knock knees, consult your doctor about a potential plan for corrective treatment. If you are experiencing joint pain, talk to your physician before the pain affects your daily life.

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