

Osteoarthritis of the Knee: How Pedorthics Can Help

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Osteoarthritis of the knee is a highly prevalent yet simultaneously highly preventable condition. In this article, I intend to reveal how the often debilitating effects of this common affliction may be eradicated by utilizing simple **Foot Orthotics**. In order to establish this, I will first identify the causes of Osteoarthritis, and secondly explain to the manner in which it may be prevented or treated.

The principal cause of osteoarthritis of the knee is a phenomenon known as “**Ground Force**.” Newton’s Third Law of motion states that every action has an equal and opposite reaction. Consequently, for each step taken by a person as they walk upon the ground, a “Ground Force” of equal magnitude, but in the opposite direction is exerted by the ground upon that person. **Under normal circumstances, the human body is able to absorb and withstand this natural stress.**

Problems occur where a patient suffers from what is known as a **patho-mechanical condition**. There are various examples of patho-mechanical conditions: skeletal deformities congenital or acquired, muscular weakness, obesity, numerous active diseases, a host of inflammatory conditions and many post-surgical conditions. In each case they affect the patient by rendering them vulnerable to the everyday exigencies of ground force and consequently rendering them more vulnerable to osteoarthritis. **It is therefore necessary to be able to identify the presence of a patho-mechanical condition if one is to find some method of treating osteoarthritis.**

The best way of achieving this is by an evaluation by a physical therapist, who specializes in treating foot related disorders and is able to identify the presence of a patho-mechanical condition. A physical therapist will consider the age, the lifestyle and the medical and surgical history of the patient, and will accordingly make recommendations for the appropriate physical therapy plan, as well as the type of corrective device if necessary at all. After the approval by your doctor, certain physical therapist may also be able to deliver an excitingly effective, yet surprisingly simple treatment. This has arisen out of the field of **pedorthics** and is known as a **foot orthotic**. I will explain each term in turn.

Pedorthics is the study of the design, manufacture and fitness of shoes and related foot appliances, prescribed for the amelioration of painful and sometimes disabling conditions of the foot and limb. Its practice is a professional health-related service and only certain physical therapists have special training in this field. An evaluation by a physical therapist who is also board certified in pedorthics, may be arranged simply by calling Comprehensive Physical Therapy at (631)-878-1771; the corrective device may only be delivered upon referral by the patient’s doctor.

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One innovation of pedorthics is the foot orthotic. A foot orthotic is a small, inert device that is inserted in the shoe or related item of footwear of the patient. If correctly shaped, this device can help minimize the effects of ground force on the affected joint, rendering the patho-mechanical condition ineffectual, and consequently alleviating the threat of osteoarthritis of the knee. The beauty of the foot orthotic is that it is universally utilizable: it can be used to correct the problem, to accommodate the problem and even to prevent the problem from occurring in the first place. This is useful, not least of which is that pedorthic patients often have more than one problem. Thus they may be given a device that incorporates more than one function, for example an “accommodative” orthotic to ease the pain that the patient is currently suffering, preventing further damage and immediately increasing mobility; and a “corrective” orthotic for long-term improvement of the condition. Such devices may be of inestimable value in the treatment of the impaired mobility of patients suffering from diseases such as diabetes.

Physical therapy and pedorthics can work perfectly in tandem to minimize the potentially devastating effects of osteoarthritis of the knee. A patient with the condition can have the physical therapist help them to re-stabilize the affected joint. Moreover, a physical therapy plan may be worked out which helps to achieve proper posture and body mechanics, with instruction regarding the relevant home exercises required for the joint and the rest of the body. Simultaneously, a foot orthotic may be inserted in order to continuously correct the problem and maintain optimum body alignment.

In addition, the versatility of foot orthotics may be turned to our advantage in catering to the individual needs of each patient. The pedorthic evaluation will determine the type of orthotic utilized: the type of material used for the device, whether the device should be custom molded or simply delivered over the counter, and most importantly, whether the device should be soft, rigid or semi-rigid. Such flexibility means that each patient may be treated effectively and efficiently, with comprehensive respect given to their individual requirements.

I have treated thousands of patients suffering from the crippling effects of osteoarthritis of the knee and have consistently found good results after a course of physical therapy. However, since becoming a Board certified Pedorthist, I have been able to produce outstanding results. In certain cases patients have cancelled their knee replacement surgery only because of the dramatic and lasting improvement in their condition, achieved in a very short span of time.

In addition to this, I have found that the costs associated with the production and distribution of this most simple of devices are inherently minimal as compared to other treatments. In this way, the devastating and debilitating disease of osteoarthritis may be dramatically lessened and even prevented at a greatly reduced cost. It seems clear: with widespread use of the foot orthotics and appropriate footwear the future looks bright for sufferers - both current and potential - of osteoarthritis of the knee.

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