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INNOVATION

CATEGORY

K-TRAC GADGET

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Knee Osteoarthritis is a degenerative joint disease which leads to reduction in joint space. This would result in damaging the cartilage and causes pain, reduced range of motion, early morning stiffness, reduce muscle strength, crepitus, swelling and joint deformity. Presently, the Knee Osteoarthritis is managed using conservative treatment such as therapy, thermotherapy, stretching, mobilisation, strengthening exercises, gait training and home exercise programmes. Along with non steroidal anti inflammatory drugs are widely used. However, the current treatment techniques could not stop the worsening of the condition. Finally, the patient should undergo total knee replacement surgeries which may be expensive and highly risk in case of elderly patients. Currently, various researches are in progress by the orthopedic surgeons. Among which an invasive procedure is becoming popular; injecting hyaluronic acid into Knee joint for treating Osteoarthritis. However, the risk of getting side effects is very high.

Indeed, no treatment is focusing in preventing osteoarthritis at the earlier stage. So our Innovation (K-Trac gadget) focuses on improving and maintaining the joint space thereby treating and preventing the progression of osteoarthritis. Our gadget attached with programmed bluetooth device provides patient specific intermittent traction which may help reducing pain and improving the joint space while administering specialized strength training programmes. Presently there is no such equipments available in the market providing intermittent traction. This device can be greatly marketed to the hospitals, clinics and to the physiotherapist who are visiting their patients at home.



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