

## ABSTRAK

**Nama Mahasiswa :** Dwito Auliandra

**Judul Laporan Tugas Akhir Studi :** Penatalaksanaan Fisioterapi pada *Osteoarthritis Genu Dextra* dengan Modalitas *Ultrasound, Transcutaneus Electrical Nerve Stimulation* dan Terapi Latihan.

**Latar Belakang :** *Osteoarthritis genu* adalah penyakit yang terjadi akibat menipisnya bantalan sendi pada lutut sehingga terjadinya gesekan antar tulang bagian atas dan bawah. Gangguan yang sering terjadi pada kondisi *osteoarthritis genu* meliputi: nyeri pada lutut, keterbatasan lingkup gerak sendi, penurunan kekuatan otot *quadricep* dan otot *hamstring*, serta keterbatasan saat menjalani aktivitas sehari-hari. Penanganan fisioterapi yang diberikan pada kondisi tersebut dengan modalitas tens, ultrasound dan terapi latihan yang bertujuan untuk mengurangi nyeri, menambah lingkup gerak sendi, mengurangi odema, menambah kekuatan otot, menurunkan spasme dan meningkatkan aktivitas fungsional.

**Metode :** Karya Tulis Ilmiah ini berfokus studi kasus, mengangkat kasus pasien dan mengumpulkan data melalui proses fisioterapi. Modalitas yang diberikan adalah *Transcutaneous Electrical Nerve Stimulation, Ultrasound* dan Terapi Latihan.

**Hasil Penelitian :** Setelah dilakukan pemeriksaan sebanyak empat kali terapi didapatkan hasil berupa adanya penurun rasa nyeri, peningkatan kekuatan otot, peningkatan LGS dan peningkatan kemampuan fungsional aktivitas pasien.

**Kesimpulan :** Pemberian Ultrasound, Trancutaneus Electrical Nerve Stimulation pada Osteoarthritis genu dapat memberikan sedikit perubahan dengan adanya peningkatan LGS, sedikit peningkatan kekuatan otot, penurunan nyeri tekan dan gerak, serta peningkatan aktivitas fungsional pada pasien.

**Kata kunci :** *Osteoarthritis, Transcutaneous Electrical Nerve Stimulation, Ultrasound, Terapi Latihan.*

**Referensi :** 44 (2015 – 2024)

## ABSTRACT

**Name of student:** Dwito auliandra

**Title of Final Project Study Report:** Physiotherapy Management of Osteoarthritis Genu Right with Ultrasound Modalities, Transcutaneous Electrical Nerve Stimulation and Exercise Therapy.

**Background:** Osteoarthritis genu is a disease that occurs due to thinning of the knee joint pads, resulting in friction between the upper and lower bones. Disorders that often occur in osteoarthritis genu include: knee pain, limited range of motion of the joint, decreased strength of the quadriceps and hamstring muscles, and limitations in carrying out daily activities. Physiotherapy treatment given to this condition with tens, ultrasound and exercise therapy modalities aimed at reducing pain, increasing range of motion of the joint, reducing edema, increasing muscle strength, reducing spasms and increasing functional activity.

**Methods:** This scientific paper is a case study, raising patient cases and collecting data through the physiotherapy process. The modalities given are Transcutaneous Electrical Nerve Stimulation, Ultrasound and Exercise Therapy.

**Results:** : After four therapy examinations were carried out, the results obtained were a decrease in pain, increased muscle strength, increased LGS and an increase in the patient's functional activity ability.

**Conclusion:** : Administration of Ultrasound, Transcutaneous Electrical Nerve Stimulation in Osteoarthritis genu can provide slight changes with an increase in LGS, a slight increase in muscle strength, decreased tenderness and movement, and increased functional activity in patients.

**Keywords:** Osteoarthritis, Transcutaneous Electrical Nerve Stimulation, Ultrasound, Exercise Therapy.

**References:** 44 (2015 – 2024)

