

PELAKSANAAN FISIOTERAPI MENGGUNAKAN MODALITAS *TRANSCUTANEOUS ELECTRICAL NERVE STIMULATION (TENS)* DAN TERAPI LATIHAN *HOLD RELAX* PADA KASUS *TENNIS ELBOW DEXTRA*

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Abstrak

Latar Belakang: *Tennis elbow* atau lateral epicondylitis merupakan cedera akibat penggunaan berlebihan (*overuse*) pada tendon otot ekstensor, terutama tendon Extensor Carpi Radialis Brevis (ECRB). Kondisi ini menyebabkan nyeri, keterbatasan lingkup gerak sendi, penurunan kekuatan otot, serta gangguan aktivitas fungsional sehari-hari. Intervensi fisioterapi melalui modalitas elektroterapi dan latihan terapeutik merupakan salah satu pendekatan yang direkomendasikan dalam penanganan kondisi ini. **Tujuan:** Mengetahui tujuan pemberian modalitas *Transcutaneous Electrical Nerve Stimulation (TENS)* dan *hold relax exercise* terhadap penurunan nyeri, peningkatan lingkup gerak sendi, peningkatan kekuatan otot, dan kemampuan aktivitas fungsional pada kasus *Tennis Elbow Dextra*. **Metode:** Penelitian ini menggunakan metode laporan kasus (*case report*) pada seorang pasien perempuan berusia 76 tahun dengan diagnosis *Tennis Elbow Dextra* yang menjalani fisioterapi di RSUD Koja Jakarta Utara pada tanggal 14–23 April 2026 sebanyak 3 sesi terapi. Evaluasi dilakukan menggunakan *Numeric Rating Scale (NRS)*, goniometer, *Manual Muscle Testing (MMT)*, dan *Patient-Rated Tennis Elbow Evaluation (PRTEE)*. **Hasil:** Setelah 3 sesi intervensi, terdapat penurunan nyeri gerak dari 3/10 menjadi 2/10 dan nyeri tekan dari 6/10 menjadi 4/10. Lingkup gerak sendi meningkat pada gerakan supinasi dan pronasi *elbow* dari 80°–0°–70° menjadi 85°–0°–75°. Kekuatan otot ekstensor *elbow* dan ekstensor wrist meningkat dari 4/5 menjadi 5/5. Skor PRTEE menurun dari 33/100 menjadi 23,5/100, menunjukkan perbaikan kemampuan fungsional secara bertahap. **Kesimpulan:** Pemberian modalitas TENS dan *hold relax exercise* menunjukkan perbaikan pada nyeri, lingkup gerak sendi, kekuatan otot, serta kemampuan aktivitas fungsional pada kasus *Tennis Elbow Dextra*.

Kata Kunci: *Tennis Elbow*, *Lateral Epicondylitis*, TENS, *hold relax exercise*, fisioterapi

PHYSIOTHERAPY MANAGEMENT USING TRANSCUTANEOUS ELECTRICAL NERVE STIMULATION (TENS) MODALITY AND HOLD RELAX EXERCISE THERAPY IN TENNIS *ELBOW* DEXTRA CASES

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Abstract

Background: Tennis *elbow*, or lateral epicondylitis, is an *overuse* injury of the wrist extensor tendons, particularly the Extensor Carpi Radialis Brevis (ECRB) tendon. This condition causes pain, limited range of motion, decreased muscle strength, and impaired daily functional activities. Physiotherapy intervention through electrotherapy modalities and therapeutic exercise is one of the recommended approaches in managing this condition. **Objective:** To describe the outcomes of Transcutaneous Electrical Nerve Stimulation (TENS) and Hold Relax Exercise on pain reduction, improvement of joint range of motion, muscle strength, and functional activity in a case of Dextra Tennis *Elbow*. **Methods:** This study used a case report method involving a 76-year-old female patient diagnosed with Dextra Tennis *Elbow* who underwent physiotherapy at RSUD Koja, North Jakarta, from April 14–23, 2026, over 3 therapy sessions. Evaluation was conducted using the Numeric Rating Scale (NRS), goniometer, Manual Muscle Testing (MMT), and the Patient-Rated Tennis *Elbow* Evaluation (PRTEE). **Results:** After 3 intervention sessions, movement pain decreased from 3/10 to 2/10 and tenderness from 6/10 to 4/10. Joint range of motion improved in *elbow* supination and pronation from 80°–0°–70° to 85°–0°–75°. Muscle strength of the *elbow* extensor and wrist extensor increased from 4/5 to 5/5. The PRTEE score decreased from 33/100 to 23.5/100, indicating gradual improvement in functional ability. **Conclusion:** The application of TENS and Hold Relax Exercise showed improvement in pain, joint range of motion, muscle strength, and functional activity in a case of Dextra Tennis *Elbow*.

Keywords: *Tennis Elbow, Lateral Epicondylitis, TENS, Hold Relax Exercise, Physiotherapy*