Tennis Elbow (Lateral Epicondylitis) Research Summary with Statistics

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***Index Terms*—Cervical spondylosis, prevalence, epidemiology, degenerative cervical spine, risk factors, neck pain**

I. INTRODUCTION AND DEFINITION

- Lateral epicondylitis, commonly known as tennis elbow, is a degenerative overuse tendinopathy affecting the extensor tendons of the elbow, particularly the extensor carpi radialis brevis (ECRB). It presents with lateral elbow pain aggravated by gripping and wrist extension tasks. PMC

II. EPIDEMIOLOGY

Prevalence & Incidence

- The annual incidence of lateral epicondylitis in the general adult population ranges from 1% to 3%. NCBI
- Primary care incidence rates for lateral elbow pain have been reported as 4–7 per 1000 people per year in Western populations. PMC
- A population-based observational study found age- and sex-adjusted incidence declined from 4.5 to 2.4 per 1000 people between 2000–2012. Mayo Clinic
- Worker cohort data reported 11.7% one-month prevalence of sudden lateral elbow complaints, with clinical lateral epicondylitis prevalence around 6.1% for right elbows and 3.1% for left in some occupational groups. CDC Stacks

Specific Sub-Populations

- Among housewives in Lahore (Pakistan), a cross-sectional study found a 39.33% prevalence of lateral epicondylitis highlighting a high disease burden in repetitive household tasks. Springer
- In college students, an incidence of around 6.7% over one academic year was reported. MSJ Online

III. DEMOGRAPHIC PATTERNS

- The peak age for lateral epicondylitis is 40–50 years. PMC
- Although once thought gender-specific, most epidemiological evidence suggests similar rates in men and women in general populations. NCBI
- Dominant arm involvement is commonly reported. orthoresearchjournal.com

VI. RISK FACTORS (QUANTIFIED)

Occupational & Physical Risks

- Manual work and repetitive forceful activity significantly increase the odds of lateral epicondylitis (e.g., OR up to 4.4 for high physical strain index). PubMed
- Occupations requiring repetitive forearm rotation and wrist extension (e.g., carpenters, computer work, gardeners) show higher risk prevalence. orthoresearchjournal.com
- Occupational health studies estimate an annual incidence of ~1 per 100 workers related to repetitive physical exposures. PubMed

Other Risk Associations

- Female sex, dominant side involvement, and manual labor have been identified as independent risk factors (e.g., OR up to 3.21 for dominant side involvement). PubMed
- Rotator cuff pathology (OR 4.95), De Quervain's disease (OR 2.48), and carpal tunnel syndrome (OR 1.50) were also associated with tennis elbow in matched case-control analysis. PubMed

Lifestyle & Treatment Outcomes

- Smoking and vigorous activity have been associated with increased risk, though results vary. NCBI
- Approx 80–90% of patients with tennis elbow will recover spontaneously within 1–2 years. NCBI

V. NATURAL HISTORY & PROGNOSIS

- Recurrence rates within 2 years following diagnosis are approximately 8.5%. Mayo Clinic
- Surgical intervention rates have increased over time from ~1.1% in early 2000s to ~3.2% after 2009 for persistent cases. Mayo Clinic
- A minority of patients can have symptoms lasting longer than 18 months. PMC

VI. KEY STATISTICAL HIGHLIGHTS

Parameter	Estimate / Statistic	Source
Annual General Population Incidence	1–3%	NCBI
Primary Care Incidence (per 1000)	4.5 2.4 (2000–2012)	Mayo Clinic
Recurrence within 2 years	8.5%	Mayo Clinic
Dominant Side Odds Ratio	OR 3.21	PubMed
High Physical Strain OR	OR 4.4	PubMed
Prevalence in Specific Group (housewives)	~39%	Springer
Spontaneous recovery over 1–2 years	80–90%	NCBI

VII. REPRESENTATIVE REFERENCES FOR ACADEMIC CITATION

Here are directly citable peer-reviewed studies and data sources:

[1] Sanders TL et al. The epidemiology and healthcare burden of tennis elbow (population-based incidence and trend analysis). American Journal of Sports Medicine, 2015. Mayo Clinic

[2] Bisset L et al. Tennis elbow: Clinical evidence reviews prevalence 1–3%, incidence data. BMJ Clin Evid, 2011. PMC

[3] Case-Control Risk Factor Study rotator cuff pathology, smoking history, other risk data for lateral epicondylitis. PubMed

[4] Physical & Psychosocial Risk Study occupational determinants with quantified ORs. PubMed

[5] Prevalence Study (Lahore Housewife Cohort) high prevalence demographic data. Springer

[6] Population Study (Working Cohort) workplace prevalence estimates.