

CHAPTER 1

BACKGROUND AND RATIONALE

Lateral epicondylitis or tennis elbow is the common cause of pain at the elbow region.¹ The prevalence of lateral epicondylitis varied between different age groups from 2 to 19%. The prevalence in the industrial workers was 7.4%.² The incidence in general practice was 4-7 per 1000 per year.³ In Srinagarind hospital there were 93 lateral epicondylitis patients out of all 25,123 patients in orthopaedic clinic in 1999. It is a common problem in office orthopaedics, and is reported to be four times as common in the fourth decade of life as in any other decade. Lateral epicondylitis is seven times more common than medial epicondylitis. Its name is a misnomer because it occurs more commonly in non-athletes than in tennis players.⁴

Many conditions have been postulated as causing lateral epicondylitis, but in most cases the lesion involves the specialized junctional tissue at the origin of the common extensor muscle at the lateral humeral epicondyle, specifically the tendinous origin of extensor carpi radialis brevis. Typically, repetitive and cumulative injury produces the pathological changes: force overload may be intrinsic, by muscle contraction, or extrinsic, by traumatic stretching; occasionally, the cause is direct trauma.⁵

The most common complaints of individuals with lateral epicondylitis are pain and decrease grip strength, both of which may affect activities of daily living^{1,5,6} and can result in absence from work. The disease can produce long-lasting and severe medical consequences and may need surgery. It may lead to economic consequences: sick leave, workers' compensation claims, transfer to lower paid jobs, and even early retirement.² Epicondylitis was the diagnosis on 1,549 newly registered claims in 1992 in Ontario. The median cost per claim was \$2,769. The median time off work (on benefits) was 34 days.⁷

More than 40 possible treatments have been proposed including various types of conservative treatment and surgical treatment in resistant cases.^{5,8} Common conservative treatments are NSAIDs prescription,^{9,10} local injection of steroid and physiotherapy.³ Steroid injection gave better pain relief in a shorter time than the physiotherapy. Injections were

more time-efficient than physiotherapy; there were two additional visits to the outpatient clinic in the injection group compare with 12 visits to the physiotherapy department.¹¹ The steroid injection treatment presented a typical pattern, with symptoms relieved quickly by 2 weeks and then deterioration for many patients at 3 months, indicating a tendency to recurrence.¹² Post-injection worsening of pain occurred in approximately half of all steroid treated patients.¹³ Although some authors reported the rupture of the Achilles tendon after local injection or oral administration of steroids, Coonrad RW pointed out that steroid injection was not a factor in producing the extensor origin tears.⁴ Two reviews of corticosteroid injections concluded that there was insufficient evidence to support its use in treating lateral epicondylitis, but the methodological quality of most trial was poor.^{3 14} Recent study in general practice showed that local steroid injection was more effective than naproxen, but they had many cointerventions (35%-38% in each groups) and 34% of contamination in naproxen group. 7.5% of patients in naproxen group discontinued the study because of gastrointestinal side effects.¹⁵ Endoscopic studies have shown that the prevalence of gastroduodenal ulcers is 15% to 30% among users of conventional NSAIDs. And now we have new generation of NSAIDs; COX-2 inhibitors which has lower GI side effects and better tolerability but has the same efficacy to control pain and inflammation in osteoarthritis and rheumatoid arthritis.¹⁶⁻¹⁹ Celecoxib is one of COX-2 inhibitors. But there is no study of COX-2 inhibitors in case of lateral epicondylitis. So we conduct study to compare efficacy between local steroid injection and COX-2 inhibitors (Celecoxib 200mg/day)

ศูนย์วิทยุทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย