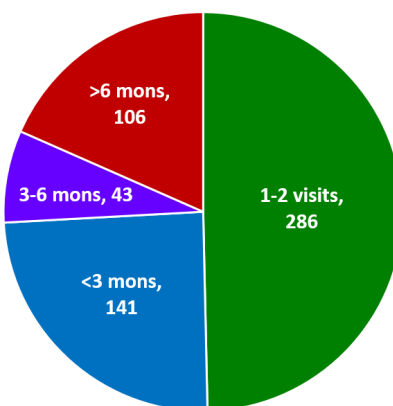


## Patients Without Resolution **After 3 Months** May Ultimately Need **Surgical Intervention**

A Mayo Clinic Study of the Epidemiology of Lateral Epicondylitis Over a Span of 13 Years on 5,867 Patients (Sanders et al., 2015)



Total duration of care for a random sample (10%) of lateral elbow tendinosis patients (2000-2012)

### Study Methods

- Descriptive epidemiology study to evaluate the natural history (i.e. incidence, recurrence and progression to surgery) of lateral elbow tendinosis (epicondylitis) in a large population.
- Study evaluated a 10% random sample (n=576) of 5,867 patients with new-onset lateral elbow tendinosis between 1/2/2000 and 12/31/2012.

### Results and Conclusions

- > 1M people (3.4%)/year presented with epicondylitis (adjusted to 2010 population).
- Recurrence rate within 2 years was 8.5%.
- The proportion of surgically treated cases within 2 years of diagnosis tripled over time.
- 18% patients received care > 6 months, with a mean time of care > 2 years.
- Most patients (106 / 149, 71%) receiving care after 3 months were still receiving care at 6 months.
- Patients without resolution after 6 months may need prolonged treatment and surgical intervention.
- Mean age at diagnosis was 47 (±11) years.

### Key Takeaways

- Extensive Mayo Clinic study.
- Traditional care for patients with long-term symptoms can be > 2 years.
- Traditional recurrence is high (8.5% within 2 years).
- Patients with symptoms > 3 months may need surgery (to remove the pain-causing diseased tissue).
- Early intervention [with the TX System] at 3-4 months may prevent long-term patient waiting and suffering.

## The Epidemiology and Health Care Burden of Tennis Elbow: A Population-Based Study

Sanders TL, Maradit Kremers H, Bryan AJ, Ransom JE, Smith J, Morrey BF. *American Journal of Sports Medicine*. 2015;43(5):1066-1071.

Lateral epicondylitis is a common condition both in primary care and specialty clinics. The purpose of this study was to evaluate the natural history (i.e., incidence, recurrence and progression to surgery) of lateral epicondylitis in a large population.

**Study Design and Methods:** This was a retrospective population-based analysis with a cohort consisting of all residents in Olmsted County, MN over a 12-year span using the Rochester Epidemiology Project to ascertain medical information. The study population was comprised of patients with new-onset lateral epicondylitis between 1/1/2000 and 12/31/2012. The medical records of a 10% random sample (n=576) were reviewed to ascertain information on patient and disease characteristics, treatment modalities, recurrence and progression to surgery. Age- and sex-specific incidence rates were calculated and adjusted to the 2010 United States population.

**Results and Conclusion:** Results from the study estimate that in absolute numbers there are approximately 1 million individuals with new onset lateral epicondylitis each year in the United States. This population-based study indicates that lateral epicondylitis is relatively common, particularly among individuals aged 40-59 years during their most productive years. 18% patients required care for more than 6 months. 12% of these patients required surgery. About 3% of the 1168 lateral elbow tendinosis cases between 2009 and 2011 had surgery within 2 years of their diagnosis (compared with about 1% in earlier years). 8.5% patients had recurrence, with a median time to recurrence of 20 months.

The data suggest that those without resolution of symptoms within 6 months of onset and conservative treatment will tend to have a more prolonged course possibly requiring definitive procedural intervention.

