

Clinical Trial ID:

NCT00000425

Title:

Toward Better Outcomes in Osteoarthritis

Summary:

This study will determine if there is a difference between commonly used nonsteroidal

anti-inflammatory drugs (NSAIDs) and acetaminophen (a pain-reliever that does not prevent

inflammation) for treating knee pain in osteoarthritis (OA). The two main results we will

look at are disease progression according to x-rays and disability over 3.5 years. Study

participants with moderate knee OA and knee pain will continue taking their NSAID or stop

taking their NSAID and start taking acetaminophen. Every 6 months we will send the

participants questionnaires that ask about pain, medication use, and disability. We will

take x-rays of the knees at the start of the study and again at the end of the study.

Detailed Description:

Nonsteroidal anti-inflammatory drugs (NSAIDs) are the most popular agents used to treat

the joint pain and inflammation associated with OA. Although NSAIDs are

useful for pain

management, recent studies have not found NSAIDs to be better than acetaminophen for the

treatment of painful knee OA. The relative lack of efficacy and possibility of accelerated disease progression, coupled with the known gastrointestinal risks of these

medications, especially to the elderly, have led us to reevaluate NSAIDs as the

first-line medical therapy for osteoarthritis. Our dominant NSAID-based approach to this

disease may be resulting in unnecessary costs, unnecessary toxicity, and accelerated

disability.

These data allow us to hypothesize that NSAIDs, by inhibiting pain and inflammation in

osteoarthritic joints, may cause or encourage people with OA to overuse damaged joints,

resulting in accelerated joint degeneration and joint replacements at an earlier time or,

alternatively, that treatment with NSAIDs may accelerate joint damage by altering

cartilage metabolism and inhibiting joint healing. We further hypothesize that anti-inflammatory therapy with NSAIDs results in toxicities that lead to increased

comorbidity and higher medical care use compared to analgesic therapy for

OA.

The specific aims of our study are to determine if (1) nonsteroidal anti-inflammatory drug therapy accelerates joint degeneration compared to analgesic medications; and (2) nonsteroidal anti-inflammatory drug therapy results in greater comorbidity and higher medical care costs and use compared to simple analgesic medication. To accomplish these aims, we will randomize 200 people with knee OA and 200 people with hip OA, defined by a Kellgren and Lawrence x-ray grade of 2 or 3, currently on NSAIDs, to either NSAIDs at their current dose or acetaminophen up to 4000 mg/day for 4 years.

Primary outcome measures will be the rate of radiographic progression, and pain and disability in the two groups. Secondary outcome variables will include medical care use, time to joint replacements, and medication side-effect profiles. We will separately identify and describe those clinical, demographic, and radiographic variables that predict accelerated progression in each group by multivariate analyses. By these methods,

we will determine the long-term outcome of NSAID therapy versus analgesic therapy for the treatment of clinical OA of the knee and hip. This information is critical to improving the outcome of a disease that is the principal cause of disability in the elderly.

Eligibility Criteria:

Inclusion Criteria:

- Knee osteoarthritis**
- Moderate radiographic evidence by Kellgren and Lawrence grade 2-4**
- Knee pain > 20 on VAS pain scale**

Exclusion Criteria:

- Bilateral knee replacements**
- Unwillingness to take acetaminophen for pain relief**

Gender:

All

Minimum Age:

50 Years

Maximum Age:

85 Years

Phase:

Phase 3

Conditions:

- Osteoarthritis

Interventions:

- Nonsteroidal anti-inflammatory drugs (NSAIDs)

- Acetaminophen

Locations:

- San Francisco General Hospital, San Francisco, California