

Regular Nonsteroidal Anti-Inflammatory Drug Use and Erectile Dysfunction

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Abbreviations:

ED = erection dysfunction; NSAID = nonsteroidal antiinflammatory drug

KEY POINTS FROM THIS STUDY:

- 1) This was a very large prospective study involving 80,966 ethnically diverse men with Kaiser health insurance, aged 45 to 69 years.
- 2) The NSAIDs assessed in this study were by category, as follows:
 - Anacin, Bufferin, Alka-Seltzer, Bayer, Excedrin or Aspirin
 - Tylenol, Aspirin-free Excedrin or Acetaminophen
 - Advil, Motrin, Nuprin, Mediprin or Ibuprofen
 - Aleve, Naprosyn, Anaprox or Naprelan
 - Bextra, Celebrex or Vioxx
- 3) Erectile dysfunction was assessed by questionnaire. Nonsteroidal anti-inflammatory drug exposure was determined by automated pharmacy data and self-reported use.
- 4) In this study, NSAID exposure was defined as receiving more than a total of a 100-day supply of 1 or more NSAIDs, any prescription for 3 or more doses per day or a self-report of using NSAIDs at least 5 days per week.
- 5) 47.4% of these men were regular users of NSAIDs.
- 6) "Nonsteroidal anti-inflammatory drug use and erectile dysfunction strongly correlated with age with regular drug use increasing from 34.5% in men at ages 45 to 49 years to 54.7% in men 60 to 69 years old with erectile dysfunction."
- 7) The unadjusted increased risk for nonsteroidal anti-inflammatory drugs and erectile dysfunction was 140%.
- 8) "With adjustment for age, race/ethnicity, smoking status, diabetes mellitus, hypertension, hyperlipidemia, peripheral vascular disease, coronary artery disease and body mass index, a positive association persisted at 38% increased risk."
- 9) "These data suggest that regular nonsteroidal anti-inflammatory drug use is associated with erectile dysfunction beyond what would be expected due to age and comorbidity."

- 10) Erectile dysfunction is a common problem in many middle-aged and elderly men with a prevalence of between 10% and 71%.
- 11) "Over the counter NSAIDs are widely used in the United States."
- 12) "Since acetaminophen is thought to have anti-COX activity, it was also analyzed. No differences in outcome were observed between groups including and excluding acetaminophen use."
- 13) "The overall ED prevalence was higher in men exposed to NSAIDs than in those unexposed. Men who met exposure criteria had a 35.2% prevalence of ED compared to 24.0% in those unexposed. This association was present in all age groups," but was highest in older men.
- 14) The incidence of ED was NSAID dose depended.
- 15) "The data revealed an association between regular NSAID use and ED that is consistent with a study in a Finnish cohort showing an increased risk of incident ED associated with NSAID use" by 80%. [Journal of Urology, 2006]
- 16) "These data suggest that regular NSAID use is associated with ED even after extensive adjustment for age and potentially confounding factors or comorbidities."
- 17) "The current strategy of using NSAIDs for cardiovascular disease protection as well as other common uses of NSAIDs should be weighed against the potential side effects of ED."

80,966 Men With Kaiser health Insurance

Age	% Taking NSAIDs (rounded)	% With ED (rounded)
45 - 49	35%	16%
50 - 59	49%	27%
60 - 69	55%	46%

COMMENTS FROM DAN MURPHY

The most amazing number is that nearly half (47.4%) of men between ages 45 – 69 years of age are regularly users of NSAIDs. More than half (55%) of men 60 – 69 years of age are regular users of NSAIDs. Recall, over the years, we have seen studies linking regular use of NSAIDs to end-stage renal disease, hypertension, gastrointestinal bleeding (including 16,500 bleeding deaths per year), Alzheimer's and other dementias, heart attack, stroke, hearing loss, and poor trauma healing.

We have also seen studies showing omega-3 fatty acids are 59-88% more effective than NSAIDs in treating chronic pain syndromes, with none of these side effects.