

Saw Palmetto (*Serenoa repens*)

History

- Saw palmetto is a shrub in the palm tree family that grows primarily in the southeastern United States, especially in Florida.
- Medicine made from the berries has been used for centuries by Native Americans for a wide range of conditions including impotence and infertility.
- In the early 1900's saw palmetto was used in the United States for urogenital complaints and was listed as such in the United States Pharmacopeia. It was dropped in the 1950's.
- Saw palmetto use continued in Germany and Italy, however, where it continues to be a very popular first line treatment for benign prostatic hyperplasia (BPH).

Most studied use

Benign prostatic hyperplasia (BPH).

Other common uses

Impotence, hair loss, poor libido, infertility, irritable bladder, prostatitis.

Summary of the evidence

- A significant amount of clinical trial data suggests that saw palmetto is effective for the treatment of mild BPH.
- Saw palmetto is well tolerated and safe, with no known drug interactions.

Pharmacology

- The precise active agent is unknown but the esterified steroids are likely to be at least some of the active ingredients, especially beta-sitosterol.

Mechanism of action

- The exact mechanism of action is not known, and is likely multifactorial. Studies suggest a possible role for the following: inhibition of 5-alpha-reductase, alpha-blockade, other anti-androgen and anti-estrogen effects, and anti-inflammatory effects.

Clinical studies

- Many studies, largely from Europe, have generally shown saw palmetto to be better than placebo and similar to finasteride. Most of these studies have had one or more deficiencies, however, including small sample size, short duration, inadequate blinding, and non-validated symptom scores.
- The best meta-analyses of these data have been by Wilt et al, published in JAMA in 1998 and subsequently updated in the Cochrane Library. 18 RCT have been identified. Summary measures have shown saw palmetto to improve urinary symptom and flow scores significantly better than placebo.
- In the largest RCT to date, 1,098 men were randomized to saw palmetto 160 mg bid or finasteride 5 mg qd for 6 months. (Carraro 1996) Both treatments improved symptom scores equally well. Peak urine flow increased slightly more with finasteride (p=0.03).
- Until recently there were no comparison trials of saw palmetto with alpha-blockers, but one such study has now reported similar efficacy to tamsulosin. (Debruyne 2002)

Adverse effects

- Saw palmetto is very well-tolerated. Side effects are rare and similar to placebo.
- Rates of ejaculatory dysfunction and impotence have been lower with saw palmetto compared to alpha-blockers and finasteride.

Contraindications/cautions

- No significant contraindications.

Important drug/herb interactions

- No recognized interactions.

Formulation and dosage

- The dose tested in the best clinical trials is 160 mg bid, standardized to 85-95% combined fatty acids and sterols.

References

1. Wilt TJ, et al. Saw palmetto extracts for treatment of benign prostatic hyperplasia. JAMA, 1998; 280-1604-1609.

2. Wilt T, et al. Serenoa repens for benign prostatic hyperplasia (Cochrane Review). In: The Cochrane Library, Issue 3, 2003. Oxford: Update Software.
3. Carraro JC, et al. Comparison of phytotherapy (permixon) with finasteride in the treatment of benign prostate hyperplasia: A randomized international study of 1,098 patients. *Prostate* 1996;29:231-240.
4. Debruyne F, et al. Comparison of a phytotherapeutic agent (Permixon) with an alpha-blocker (Tamsulosin) in the treatment of benign prostatic hyperplasia: a 1-year randomized international study. *Eur Urol.* 2002;41(5):497-506.

For Additional Information

1. Natural Medicines Comprehensive Database. Available through UW Healthlinks.
2. UpToDate. Available through UW Healthlinks.
3. About Herbs. <http://www.fammed.washington.edu/predoctoral/CAM/sites.html>.
4. Herbmed.org for more general background.
5. For information about the quality of specific brands, check Consumerlabs.com.

