ABSTRACT

Sabal serrulate fruit extract is being used in human benign prostatic hyperplasia (BPH)

Thus, it's interesting to see if this phytopharmacon affects the way the human prostate metabolizes androgens. Males naturally become aware of their prostates as they age. Prostate disorders are the subject of this case study. This instance focuses on a single sign associated with prostate cancer. The problem addressed in this case is the prostate-specific antigen (PSA). When a biopsy is not performed, patients with a serum PSA level of less than 4 ng/ml are generally regarded as having no malignancy. Based on the positive outcomes, Sabal serrulata extract is advised for the treatment of prostatic hyperplasia causing mild to moderate symptoms.

Keywords: Sabal serrulata, BPH, PSA, phytopharmacon, prostate, malignancy.

Introduction

Globally, prostate cancer ranks fifth in terms of cancer-associated mortality among men and is the second most common type of cancer. Serum PSA screening for prostate cancer seeks to reduce overall disease-specific mortality and identify the disease at an early, intervenable stage amenable to curative treatment. Prostate cancer diagnoses rise as a result of PSA screening. Even though it is clinically advised, PSA screening is still debatable.

Moreover, there is currently no proof that screening for prostate cancer saves lives. According to a different study, screening for prostate cancer does not lower overall mortality over a ten-year period, but it may have a small absolute benefit in disease-specific mortality. The study goes on to say that these advantages must be balanced against the possible short- and long-term drawbacks of PSA screening, such as the possibility of overdiagnosis and treatment, complications from biopsies and the ensuing medical intervention, and other issues. Despite the fact that BPH is treated with the human prostatic concept. Beyond medication-induced hyperplasia (BPH), there is no question that androgens play a role in some way It has been demonstrated that the active androgen that mediates the intracellular action of androgens in the prostate is dihydrotestosterone (DHT). 5a-Reductase is most likely the predominant enzyme throughout the entire hormone metabolism process because it catalyzes the irreversible conversion of testosterone to DHT. Its potential is significantly greater than that of other substances due to the well-established discovery that the prostate has a significantly higher DHT content than either skeletal muscle or corresponding plasma.

As a result, different phytopharmaceuticals are used to treat BPH. The inhibition of 5a-reductase is a promising and proven inhibitory effect on 5a-reductase. The latter medications, like fruit extracts from Sabal semilata, are causing a subjective improvement in the symptoms of the patients. Based on the known antiphlogistic and antiedematous properties of Sabal serrulata extracts, it has been assumed that this effect occurs. Herein, it has been investigated to what extent the Sabal serrulata extract IDS 89, i.e., the active principle of the commercially available phytopharmacon Strogen® S/uno, is capable of inhibiting 5a-reductase in vitro and to define in more detail the compounds responsible for such inhibition.
Morphological Character

<table>
<thead>
<tr>
<th>Latin name</th>
<th>Sabalis serrulatae fructus</th>
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<tbody>
<tr>
<td>English common name</td>
<td>Saw Palmetto Fruit</td>
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<tr>
<td>Botanical name</td>
<td>Serenoa repens (W.Bartram) Small (syn. Sabal serrulata (Michx.) Schult.f.)</td>
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<tr>
<td>General description</td>
<td>An indigenous palm tree of the Southeast United States is the saw palmetto. Its height varies from 4 to 10 feet based on the area. The dried, ripe berry is the medicinal portion. Another name for it is Sabal fructus. Saw palmetto berries and seeds are both utilized medicinally.</td>
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<tr>
<td>Therapeutic area</td>
<td>Urinary tract and genital disorders</td>
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Table 1: Morphological character of Sabal serrulata.

Geographical Distribution

The species is indigenous to the tropical and subtropical regions of the Americas, ranging from the South Atlantic and Gulf Coast states of the Southeast to Colombia and Venezuela via the Caribbean, Mexico, and Central America.
Cultivation of Sabal serrulata

The fruit, a sizable drupe with a reddish-black color, is a staple food for both humans and wildlife. Certain Lepidoptera species, like Batrachedra decoctor, whose larvae only consume the plant, use it as a food source. Rarely do stems or trunks grow upright, although certain populations do. This hardy plant grows very slowly and has a long lifespan; some specimens, particularly in Florida, maybe as old as 500–700 years. The leaves have a bare petiole. The species' common name comes from the petiole's sharp, tiny teeth or spines. When working near a saw palmetto, gloves should be worn because the teeth or spines can easily break the skin. Inland, the leaves are light green, while along the coast, they are silvery-white. The length of the leaves is 1-2 m, and the leaflets are 50-100 cm. They resemble the leaves of the Sabal palmetto genus. The yellowish-white, roughly 5-mm-diameter flowers are produced in dense, compound panicles that can reach lengths of 60 cm.

Chemical Composition

The active components of saw palmetto are flavonoids, plant sterols, and fatty acids. High molecular weight polysaccharides, or sugars, are also present in the berries, and these may boost immunity or lessen inflammation.

Mechanical of Action

A major contributing factor to BPH is hormonal imbalance; in fact, normal levels of androgens and estrogens work together to regulate the prostate's growth and development, which in turn controls the ratio of cell division to apoptosis. Actually, dihydrotestosterone (DHT), a hormone that binds to androgen receptors (AR), carefully controls the growth and proliferation of the prostate volume. These paracrine pathways aid in the regulation of the proliferation and apoptosis of prostate epithelial cells. Androgens are also associated with the development of BPH and prostate cancer. To stop cell death in the ventral prostate, testosterone controls the amounts of procaspase and caspase-3 and -6 mRNA and active protein in a model of castrated rats. Because aberrant growth is associated with the activation of proliferative processes and vice versa with the inhibition of apoptotic pathways, which is induced by androgen stimulation, DHT is essential in the development of BPH.
Figure 5: Schematic representation of the endocrine-linked apoptotic mechanisms involved in benign prostatic hyperplasia (BPH) and of its medical treatments

**Key Benefits**

This medication is mainly used to treat affection of the genito-urinary tract. It also aids in weight gain. It has a calming effect on mucous membranes and helps with problems associated with frequent coughing and colds.

• Lessens headaches and stress related to work and studying

• Treats conditions characterized by acidity and belching along with stomach pain.

• Helps with disorders related to the ovaries and pain during menses that causes weakness; • Reduces the urge to urinate constantly and the feeling of fullness in the bladder; • Reduces prostate enlargement that causes pain; • Alleviates breast pain and encourages the growth of undeveloped breast tissue.

Figure 6: Key benefits of *Sabal serrulata*. 
Side Effects

For most people, saw palmetto is LIKELY SAFE. Usually, side effects are not too bad. Dizziness, headaches, nausea, vomiting, constipation, and diarrhea have been reported by a few people. There have been reports of impotence linked to saw palmetto. But these adverse effects don't seem to happen with saw palmetto any more frequently than they do with a sugar pill. There is some worry that saw palmetto may cause issues with the pancreas or liver in certain individuals. Nevertheless, insufficient data is available to determine whether saw palmetto genuinely caused these adverse effects. When properly injected into the rectum, saw palmetto has the potential to be safe for up to 30 days. It is unknown, though, if using it for extended periods of time is safe.

Dosing

In scientific studies, the following dosages have been investigated:

- For patients with benign prostatic hyperplasia (BPH), take 160 mg twice day or 320 mg all at once.
- To treat bald spots, take 200 mg twice a day along with 50 mg of beta-sitosterol twice a day.

Precautions

Herbal medicine is a traditional method of promoting health and curing illness. Herbs, however, can have adverse effects and interact with drugs, supplements, and other herbs. For these reasons, you ought to use caution when taking herbs and seek medical advice before doing so.

In general, sabal serrulata is considered safe when taken as prescribed. Although headache, nausea, diarrhea, and dizziness have been reported, side effects are extremely uncommon. Saw palmetto was blamed for severe bleeding during surgery in at least one instance. People who took saw palmetto have reported two cases of liver damage and one case of pancreas damage. However, not enough data is available to determine whether saw palmetto caused these side effects. Saw palmetto self-treatment for BPH is NOT advised. To rule out prostate cancer, get a proper diagnosis from your physician. Saw palmetto shouldn't be taken by women who are pregnant, nursing, have hormone-related cancers in the past or are at risk of developing one because it may have effects that are similar to those of some hormones.

Conclusion

Homoeopathy works well for glandular disorders, which can range from benign to malignant. One such gland is the prostate, where homeopathy has previously demonstrated efficacy in treating benign hyperplasia of the prostate (BHP). In addressing prostate cancer, the current study adds yet another feather to the homoeopathic cap. But it should also be noted that certain medications are needed in addition to constitutional medications to treat the cases. In this instance, milk and chappatis were stopped for dinner in favor of adding more green leafy vegetables to the diet, which helped the body fight conditions like carcinoma. Nutrition and diet should be addressed concurrently in each case.

Reference


