Effects of Saw Palmetto on Lower Urinary Tract Symptoms From Benign Prostatic Hyperplasia

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**Effects Of Saw Palmetto On Lower Urinary Tract Symptoms From Benign Prostatic Hyperplasia**

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**Abstract**

- Benign prostatic hypertrophy (BPH) is common in older males and can cause lower urinary tract symptoms (LUTS).
- Saw Palmetto, an herbal supplement, is normally implemented as an alternative medication to treat lower urinary tract symptoms associated with BPH.
- The review of literature evaluated studies comparing the effects and outcomes of Saw Palmetto versus commonly prescribed medications such as antiandrogen agents.
- There are conflicting studies indicating Saw Palmetto’s efficacy on lower urinary tract symptoms and reduction of BPH.
- Saw Palmetto has no side effects, and is available at a low cost when compared to prescribed medications for BPH.

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**Introduction**

- The objective for providers is to prescribe or recommend a medication that is effective and affordable with low side effects for LUTS associated with BPH.
- Mild LUTS are treatable with prescribed medications such as antiandrogen agents.
- An alternative phytotherapeutic option, Saw Palmetto, is also available which may be effective on LUTS associated with BPH, may be financially beneficial and may have less side effects.

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**Statement of the Problem**

- Few studies have researched the outcomes of Saw Palmetto.
- Many patients have concerns with increased cost and side effects with prescribed medications.
- Some religious or cultural concerns prohibit use of prescribed medications, so preferences for viable alternative phytotherapeutic options may exist.

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**Research Questions**

- Is Saw Palmetto, an herbal supplement, an effective phytotherapeutic alternative to commonly prescribed medications in treating LUTS associated with BPH?
- Is Saw Palmetto cost effective?
- Is there less toxicity associated with Saw Palmetto in comparison to prescribed medications?
- Is Saw Palmetto a viable alternative phytotherapeutic option among culturally/religiously diverse patients?

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**Literature Review**

- BPH consists of prostatic stromal/epithelial remodeling.
- Age is the most commonly related risk factor at 50% in men at age 60 and 90% in men age 70 and older.
- Changes in dihydrotestosterone (DHT) and 5α-reductase in the epithelium and stroma are thought to disrupt the balance of growth factor signaling and epithelial/stromal interactions resulting in excessive growth and tissue hyperplasia.
- The prostatic perirethral area is common for BPH resulting in compression and gradual lower urinary tract symptoms (LUTS).
- Gene expression of 2 types of inhibitors of apoptosis proteins (IAPs), neuronal apoptosis inhibitor protein (NAIP) and survivin, increase BPH. (Minutoli et al., 2014).
- Cell viability assays showed that the lipidosteric extract of Saw Palmetto had prostatic epithelial/stromal cytotoxic effects resulting in a 100% decrease in cell viability at doses of 1000μg/mL and greater. (Sirab et al., 2013).
- Saw Palmetto (Prostalan), at 50μg/mL, can inhibit proliferative functions of endothelial growth factor and inhibit cytokine production on prostatic PC-3 cells. (Iglesiases-Gato et al., 2011).

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**Discussion**

- An experimental trial found that Saw Palmetto, combined with Selenium and Lycopene, has a greater effect on BPH versus implementing either treatment alone. (Minutoli et al., 2014).

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**Applicability to Clinical Practice**

- There are conflicting studies indicating Saw Palmetto’s efficacy on LUTS and reducing BPH.
- Prostataplex has a short term improvement on LUTS, but does not affect BPH.
- Prostataplex may inhibit BPH.
- Saw Palmetto combined with Selenium and Lycopene may have a greater effect on BPH than Saw Palmetto alone.
- Saw Palmetto is inexpensive and has no side effects.
- It is reasonable, with patients that have resisted or discontinued prescription medications, to discuss the option of Saw Palmetto although it may or may not lower LUTS and/or reduce BPH.

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**Table 3 Summary of adverse effects**

<table>
<thead>
<tr>
<th>Group</th>
<th>Saw TAM (N = 20)</th>
<th>Saw + TAM (N = 20)</th>
<th>Avy (20%)</th>
<th>pH (40%)</th>
<th>Qmax (17%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moder</td>
<td>Rimih</td>
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<tr>
<td>Asthenia</td>
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<td>Fatigue</td>
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<td>Diastasis</td>
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<tr>
<td>Postural hypotension</td>
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<tr>
<td>Dry mouth</td>
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<tr>
<td>Decrease libido</td>
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<tr>
<td>Ejaculatory disorders</td>
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</tbody>
</table>

(Hizil et al., 2006)

- Lipidosteric extracts from Saw Palmetto decrease prostatic cellular viability and down regulate gene expression affecting prostatic cellular apoptosis, proliferation pathways and inflammation pathways which reduce the pathogenesis of BPH. (Sirab et al., 2013).
- Prostataplex (Saw Palmetto) has a short term improvement on LUTS, but it does not affect prostate hyperplasia. (Shi et al., 2008).
- Conversely, Iglesiases-Gato et al., 2011, found that a minimum concentration of 50 μg/mL of Prostalan (Saw Palmetto) inhibited prostatic hyperplasia.
- Saw Palmetto at a dosage of 960 mg did not reduce LUTS associated with BPH versus placebo. (Barry et al., 2011).
- There were no statistically significant differences with the AUASI scores and the peak urinary flow rates between the Saw Palmetto and placebo groups, so Saw Palmetto did not reduce LUTS associated with BPH. (Bent et al., 2006).
- Saw Palmetto does not produce any side effects when taken for up to 18 months. (Avin et al., 2013).
- Saw Palmetto at a dosage of 960 mg does not cause side effects. (Barry et al., 2011).
- The combination of Tamsulosin with Saw Palmetto may cause postural hypotension, fatigue, rhinitis, ejaculation disorders, decreased libido, and dry mouth. There were no adverse effects observed with Saw Palmetto alone. (Hizil et al., 2006).

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**References**


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**Thanks...**

- Dr. Susan Kurz as faculty advisor and mentor for this scholarly project.
- The faculty of the Physician Assistant Department at the University of North Dakota.
- Dawn Hackman for her availability/advice to the UND graduate students.