The certainty of evidence is very low [623] and further research is needed this treatment modality can be recommended.

4.6.4.2.8 Saw Palmetto Extract

Saw palmetto extract, consumed as supplements by men with suspected BPO, is believed to attenuate urodynamic symptoms in OAB of not only males but also females. A placebo-controlled randomised trial on 72 elderly Japanese women investigated the effect of twelve weeks of 320mg saw palmetto extract on their LUTS scores. Results showed significant reduction in daytime frequency scores but not on the other symptoms. Nocturia scores were lower after saw palmetto extract intake in a subset of patients with SUI. Certainty of the evidence is low [237].

4.6.4.3 Summary of evidence and recommendations for pharmacological treatment of nocturia

Summary of evidence	**LE**
Desmopressin treatment for nocturia shows significant reductions in nocturnal urine output, nocturnal urinary frequency, and nocturnal polyuria index.	1b
Most nocturia patients tolerate desmopressin treatment without clinically significant hyponatraemia; however, the risk increases with increasing age and decreasing baseline serum sodium concentration.	1a
Treatment of nocturia in OAB patients with anticholinergic drugs shows reduction in nocturia episodes.	1b
Mirabegron improved nocturia-QoL scores, decreased nocturnal frequency and water intake, and prolonged hours of uninterrupted sleep, in women with OAB.	1b
Combination of PFMT and anticholinergics does not appear to confer additional benefit over anticholinergics alone.	1b
Combination of anticholinergic and desmopressin treatment appears to reduce nocturnal voided volume and time to first nocturnal void in women with nocturnal polyuria.	1b
Vaginal oestrogen may be beneficial in the treatment of nocturia in around 50% of women.	1b
Afternoon (timed) diuretic treatment with furosemide reduces nocturia episodes and nocturnal voided volume in men but no similar studies have been conducted in women.	1b
Assessment of clinical significance is important when evaluating trials involving treatment strategies for nocturia, as statistical significance can be achieved with small reductions in nocturia episodes.	3
Melatonin (used for up to two weeks) reduces nocturnal voids, improves LUTS symptom scores and nocturia quality of life scores with low adverse event rates.	1b
Majority of women who received protopine and nuciferine experienced improvement in nocturia symptoms.	3
Saw palmetto extract resulted in lower nocturia scores in elderly women with SUI.	1b

Recommendations	**Strength rating**
Offer desmopressin treatment for nocturia secondary to nocturnal polyuria to women, following appropriate counselling regarding the potential benefits and associated risks (including hyponatraemia).	Strong
Carefully monitor serum sodium concentration in elderly patients treated with desmopressin. Avoid prescribing desmopressin to patients with a baseline serum sodium concentration below normal range.	Strong
Offer anticholinergic treatment for nocturia to women with urgency urinary incontinence or other LUTS, following appropriate counselling regarding the potential benefits and associated risks.	Strong
Inform women with nocturia that combination of behavioural therapy and anticholinergic drugs is unlikely to provide increased efficacy compared with either modality alone.	Weak
Offer combination of anticholinergics and desmopressin to women with overactive bladder (OAB) and nocturia secondary to nocturnal polyuria, following appropriate counselling regarding the potential benefits and associated risks.	Weak
Offer mirabegron in women with OAB to improve nocturia.	Weak
Offer vaginal oestrogen treatment to women with nocturia, following appropriate counselling regarding the potential benefits and associated risks.	Weak