

In the name of God

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# Title

Squill Oxymel (Sekanjabeen Onsoli), a golden choice for persistent asthma

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# Background

Asthma is among the most common chronic diseases worldwide

A cascade of inflammatory mediators plays a central role in the pathophysiology of asthma

# Background

Currently, inhaled corticosteroids (ICS) are the mainstay of asthma treatment

Despite their positive effect on asthma control, evidence shows their incomplete efficacy in asthmatic patients

ICS are not completely safe, their various side effects are: cataract, hypertension, glaucoma, bone loss and mild adrenal and growth suppression in children

# Background

Sekanjabeen Onsoli exerts anti-inflammatory, anti-oxidant, anti-cholinergic, and mucus secretion modulating effects

In traditional medicine, Squill (*Drimia maritima* (L.) Stearn) Oxymel was used to treat phlegmatic dyspnea like wet asthma and COPD with phlegmatic secretions

# Objectives

We used Sekanjabeen Onsoli to treat moderate to severe persistent asthma patients to check its effectiveness and safety in a pilot, triple-blind, randomized clinical trial

# Methods

In 60 patients with stable moderate to severe persistent asthma randomly was prescribed either Sekanjabeen Onsoli, simple Sekanjabeen, or a placebo, 10 cc, 2 times a day, as an add-on to their routine treatment for 6-week

At the beginning of the study and the end of it, spirometry and plethysmography were performed

For evaluation Forced Expiratory Volume in first second (FEV1) and St. George's respiratory questionnaire (SGRQ) was used

# Results

Fifty-four patients completed the study

Significant improvement in spirometry parameters, especially FEV1 ( $1.54 \pm .38$  vs.  $2.11 \pm .49$  l), in the Sekanjabeen Onsoli group compared with the other groups was the main outcome of the study

The increases in FEV1 liter, FEV1%, FEV1/FVC%, and MEF 25–75% during the intervention were significantly higher in the Sekanjabeen Onsoli group ( $p < .001$ )



# Results

Plethysmographic parameters showed no significant improvement between the study groups ( $p > .05$ )

Significantly improve happend in SGRQ scores in both the Sekanjabeen Onsoli and the simple Sekanjabeen groups ( $p < .001$ )

In 5 patients who used the Sekanjabeen Onsoli and simple Sekanjabeen were reported nausea and vomiting. No serious side effect was observed

# Conclusions

The results show preliminary evidence for the efficacy and safety of the add-on treatment of Squill Oxymel in patients with asthma

The demonstrated beneficial effects might be attributed to the anti-inflammatory and anticholinergic activities of Squill

# Conclusions

Dysregulated oxidative stress is present in asthma, but antioxidant drugs are not routinely recommended in asthma treatment

In the study performed by Mammadov et al., the antioxidant activity of Squill was verified

# Conclusions

It is assumed that the increase in FEV1 is due to both its anti-inflammatory and its bronchodilator effects

Bashir et al. reported that Indian Squill has smooth muscle relaxant activity in the respiratory tract with the dual effects of calcium influx blockade and anticholinergic effects

# Conclusions

The patients were not followed long after the end of study

However, anecdotal data collected from the majority of the patients showed that the subjective beneficial effects of Squill continued many weeks after the end of the study

# Conclusions

Therefore, it seems the respiratory effects of Squill are attributable to its anti-inflammatory features rather than its bronchodilator effects

