

Uses and ability of chilies in reducing mucus congestion

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Madam, Rhinitis and pharyngitis are commonly occurring conditions in Pakistan, due to pollen, dust mites, exhaust from the automobiles, industrial pollution and other non-infectious causes. Most commonly it is treated symptomatically along with the drugs such as antihistamines, analgesics, antibiotics, steroids and leukotriene receptor antagonists. On average each patient spends around PKR 1000-3000 on its treatment.¹ A number of home remedies are available to treat nasal congestion and throat discomfort, including plentiful supply of fluids to thin the mucus, using saline nasal sprays to keep the nasal passages hydrated, and using various decongestants.

Capsaicin (trans-8-methyl-N-vanillyl-6-nonenamide) is an important functional component of chili. Research has shown that even a small amount, 0.1µg of capsaicin is sufficient to elicit pain when given intradermal.² However its use in ointments and patches for analgesic purposes in cases of burn injuries, neuropathic and musculoskeletal pains contradicts its pain eliciting property. This analgesic function is due to its capability of depleting substance P stores from the primary afferent neurons, eventually relieving pain in conditions like peripheral arthritis. Depleting substance P in C fibers and reducing neurogenic inflammatory response plays a great deal

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in relieving mucosal congestion and subsiding rhinitis symptoms.³ It also acts as an irritant on transient receptor potential cation channel subfamily V member 1 (TrpV1), which stimulates the chemosensory pathway resulting in a cough reflex.⁴

Capsaicin has proved its beneficial role in relieving congestion through thinning of mucus and also through its cough eliciting characteristics, which help in expectorating the excess mucus and clearing trachea and nasal pathways. Though, it acts as an irritant, but when used clinically in adjunct with recommended therapies, it works out well and has come up with positive outcomes.⁵ In developing countries, the use of chili because of its easy availability and low price should be considered as a complementary and alternative medicine in managing rhinitis.

References

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