

## Original Research Article

# Use of topical nasal steroid spray in the treatment of non-specific chronic pharyngitis- our experience

Naveed Gul<sup>1</sup>, Monica Manhas<sup>2</sup>, Parmod Kalsotra<sup>1</sup>, Faizah Deva<sup>1</sup>, Mehak Taban Mir<sup>3\*</sup>

<sup>1</sup>Department of Otorhinolaryngology and Head and Neck surgery, <sup>2</sup>Department of Physiology, <sup>3</sup>Department of community Medicine, Government Medical College, Jammu and Kashmir, India

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### \*Correspondence:

Dr. Mehak Taban Mir,

E-mail: mehaktabanmir@gmail.com

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### ABSTRACT

**Background:** The present study was done to find the effectiveness of nasal steroid spray in the treatment of non-specific chronic pharyngitis.

**Methods:** The present prospective study was carried out in department of Otorhinolaryngology and Head and Neck surgery, Government Medical College Jammu from July 2017 to March 2020. Patients were selected randomly from the ENT OPD, a detailed history was taken, thorough clinical examination was done to confirm the diagnosis and exclude all other existing illnesses and associated problems. Fluticasone nasal spray was used to see the relief of symptoms. Persistent relief was central to be considered proof of effectiveness of the treatment.

**Results:** 40 patients were taken up for the present study, out of which only 32 patients showed relief in symptoms. 25 patients showed relief of symptoms with only 1-2 sprays. 8 patients did not report any relief of symptoms even after continues use of steroid nasal spray for 3-4 weeks. No significant side effect was noticed in any patient.

**Conclusions:** In the present study, it is concluded that use of steroid (fluticasone) nasal spray in well selected cases of non-specific chronic pharyngitis is very effective, safe and cheap.

**Keywords:** Nasal steroid spray, Non-specific chronic pharyngitis

### INTRODUCTION

Chronic 'non-specific pharyngitis' is a diagnosis, which is made when there is no definite aetiology or a number of aetiologies are proposed. A number of drugs and therapies ranging from local applications like Mandl's paint and throat gargles to anxiolytics have been tried over the decades with no sustained relief in symptoms often times.<sup>1</sup> Non-specific pharyngitis is most prevalent in the more polluted cities, the causes identified as being dust, smoke and industrial pollutants.<sup>1</sup> These result in a persistent state of hypersensitivity of the nasal and pharyngeal mucosa, causing much distress to the patient. Any Therapy given should be aimed at preventing the recurrent attacks of allergic or vasomotor rhinitis and the resulting secondary infection. Nasal steroids and oral steroids have been mentioned useful in the treatment of

allergic naso-pharyngitis of acute nature for relief of pain and other symptoms in two studies.<sup>2,3</sup>

This study was aimed at examining the effectiveness of nasal steroid spray in preventing recurrent attacks of allergic/vasomotor rhinitis and the resultant persistent hypersensitive state of throat mucosa causing the symptoms of non-specific recurrent/chronic pharyngitis.

### METHODS

#### *Study type, place and duration*

The present study was a prospective study, conducted at Government Medical College, Jammu, from July 2017 to March 2020.

**Selection criteria**

Patients were selected randomly from the ENT OPD, a detailed history was taken, thorough clinical examination was done to confirm the diagnosis and all other existing illnesses and associated problems were excluded. Those from extremes of age groups as well as those who did not follow up, were eliminated from the study. Patients with symptoms of acid peptic disease were also included since the aim of the treatment was a total reduction of hypersensitivity of throat mucosa.

**Procedure**

Fluticasone nasal spray was started as 2 puffs in each nostril once daily along with an oral antihistamine and tapered off after one week to one puff each nostril daily for another month, followed by one puff each nostril on alternate days tapered down to twice weekly over 3-4 weeks. The antihistamine was usually stopped after the first visit. For some who had much relief, the dose was made one puff bilateral twice weekly after one month itself. Patients were followed up after two visits (at one week and one month) as and when they could come. The results were analysed in 4 categories: 1) Having 100% relief, 2) >90% relief, 3) >75% relief and 4) >50% relief.

SPSS 23 software was used to analyse the data.

**RESULTS**

In the present study, a total of 40 patients were included for whom a follow up over a range of 6 months to 1 year was established. As it was a prospective study, patients follow up could not be uniform for all and while patients in the earlier part of the study could be followed up for 2-2½ years, the latter entrees could not get such a long follow-up, yet the least is a 6 months follow-up which may be adequate enough to predict the effectiveness of a new treatment schedule. Of the 40 patients, (62.5%) were Females and (37.5%) were males (Table 1).

**Table 1: Gender wise distribution of patients.**

Gender	Number of patients	Percentage
Males	15	37.5
Females	25	62.5

**Table 2: Presenting symptoms.**

Symptom	Number of patients	Percentage
Throat irritation	33	82.5
Foreign body sensation	28	70
Throat pain	18	45
Globus symptoms	5	12.5

Most of the patients were in the age group of 30-50 years. It seemed that people over 50 years hardly give

importance to throat symptoms unless very significant. The occupation related distribution showed that the most affected group is that of housewives (38%) followed by students, then manual labourers. In terms of duration of symptoms, the majority (40%) had symptoms between 6 months-2 years. Throat irritation was the most common reported symptoms, followed by foreign body sensation and throat pain (Table 2). Post nasal drip was the most common associated symptom (Table 3). 5 patients out of 40 patients gave a history of smoking occasionally. Upon Clinical examination, significant findings were Catarrhal Pharynx seen in 90 % cases and atrophic tonsils seen in 55% cases. Allergic nasal findings were seen in 8 (20%) patients. Eosinophilia was detected only in 11 patients (27.5%).

**Table 3: Associated symptoms.**

Associated symptoms	Number of patients	Percentage
Post nasal drip	31	77.5
Allergic symptoms	25	62.5
Peptic symptoms	4	10

40 patients were taken up for the present study, out of which only 32 patients showed relief in symptoms. 25 patients showed relief of symptoms with only 1-2 sprays. 8 patients did not report any relief of symptoms even after continues use of steroid nasal spray for 3-4 weeks. No significant side effect was noticed in any patient. Among 32 patients who showed relief of symptoms, 15 patients showed 100% relief of symptoms, 10 patients showed 75% relief of symptoms and 7 patients showed only 50% relief of symptoms (Table 4). While majority of the patients (71.9%) had to use only 1 unit/puff in each nostril daily, 17.5% had to use 2 units/puffs daily and only 10.6% patients had to use more than 2 units/puffs daily to get optimum relief. 8 patients did not get any relief. No significant side effect was seen in any patient during the study period.

**Table 4: Relief of symptoms.**

Relief of symptoms	Number of patients	Percentage
100 percent relief	15	37.5
75 percent relief	10	25
50 percent relief	7	17.5
No relief	8	20

**DISCUSSION**

Chronic/recurrent non-specific pharyngitis is very distressing to the patient and the treating doctor. Otorhinolaryngologists often do not pay much attention to these patients. Though not of fatal nature or functionally disabling, it still is a problem that comes always to our OPDs and therefore worth finding a more plausible/worthy solution to, than already existing.<sup>1</sup>

Otolaryngologists down the ages have prescribed gargles, mouthwashes or other remedies such as Mandl's paint. There is no evidence that any of these measures is of therapeutic benefit.<sup>4</sup> In the present study, the most common symptom reported was of throat irritation followed by foreign body sensation and throat pain. Most common associated symptom was post nasal drip followed by nasal allergy. Post-nasal drip may be due to nasal irritation by allergens or residual clearing of post infected sinuses.<sup>1</sup> In all these situations a reduction of the mucosal hypersensitivity goes a long way in alleviating symptoms and effecting relief to the patient. It is known that the general hypersensitivity of the URT (upper respiratory tract) mucosa is brought down by the use of steroid sprays. In the present study 15 patients showed 100% relief of symptoms, 10 patients showed 75% relief of symptoms and 7 patients showed only 50% relief of symptoms, these findings correlate with the literature.<sup>1</sup> In the present study 40 patients were taken up for the present study, out of which only 32 patients showed relief in symptoms. 25 patients showed relief of symptoms with only 1-2 sprays. 8 patients did not report any relief of symptoms even after continues use of steroid nasal spray for 3-4 weeks, these findings resemble and correlate with the study of Kumari et al.<sup>1</sup> No significant side effects were reported except occurrence of throat symptoms in those who were included as failures.

The limitation of the present study is that, it was a single institutional study.

## CONCLUSION

In the present study, it is concluded that use of steroid (fluticasone) nasal spray in well selected cases of non-specific chronic pharyngitis is very effective, safe and cheap.

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