

Effect of Traditionally Designed Nutraceutical on the Treatment of Allergic Rhinitis and Throat Infection

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ABSTRACT

The health supplement prepared was evaluated and finally reach a conclusion that proposed nutraceutical has a sterilizing effect, and having no toxic reaction. Instead of this it was found to be useful on the treatment of frank allergic rhinitis and throat infection

Keywords: Nutraceutical, Traditional medicine, Antilavage, Allergic rhinitis.

INTRODUCTION

This study was conducted to establish the effect of traditionally designed nutraceutical on the treatment of allergic rhinitis and throat infection. The nutraceutical was prepared from different herbs described in Ayurveda using standard operation procedures and were tested for heavy metal and microbial load. The modern scientific world today becoming more aware of health. Asia's traditional systems of medicine are person centered, as much concerned with restoring high levels of health as well as curing disease.

The world may be anxious to accept other nutraceuticals that have been scientifically investigated. Struck by the claim that some of the indigenous remedies have marked anti infective properties it was decided to study the effect of newly formulated one because it embodies the anti microbial principles of several plants. And possible effect on allergic rhinitis was also investigated. The formulated one is claimed to be effective therapy against all infective states particles ear, nose, and throat. It helps to build up resistance to infection in the mucosa, dries up the excessive secretion of mucosa membrane and is more effective in the treatment of common cold.

A regimen of various herbs including Pippali (piper longum), Badam (Prunus Amygdalus), Moriga Pterygosperma, Thulasi (Osmium Sanctam), Amla (Phyllanthus emblica) and some other herbs were prepared and a study was conducted to evaluate the effect of health supplement on treatment of common cold, rhinitis, and throat infection.

MATERIALS & METHODS

Methodology

The study was conducted in Kerala at P.S.S.M.hospital. There were total of 30 members, out of which 27 members opted for supporting this study. Initially all the members were briefed about the scope of the project and were given project proformas for their willingness to join the study as per international ethical guidelines.

Sampling was followed by feeding of subjects with the food supplement. The standard operative procedures (SOP) for the preparation of the trail food supplements are under patent process hence cannot be revealed at this stage. The trial supplement was tested for heavy metals and free from cadmium, lead and arsenic. The food supplement was also tested for microbial load and total bacterial count. Total bacterial count was 7.2×10^4 CFU/g, whereas total fungal count, enterobacteria count and salmonella spp, was in the permissible limits

The study proper:

In the past 8 months, 27 cases were selected for the above study from the voluntary accepted subjects in Malappuram district at P.S.M.M Co-operative Hospital, Out of there 17 cases of acute purulent sinusitis (with or without allergy) and 10 were cases of frank allergic rhinitis. Each patient was examined twice a week and the progress of the disease relief was carefully noted. Cases with acute sinusitis presented complaints like repeated colds, sneezing, fever, fronto-temporal head aches, watering coughs, nasal blocking, loss of interest in the surrounding, epistaxis, oedema over eyelids and some times even deafness. The main complaints of patient with allergic rhinitis were

- Watering rhinorrhea
- Sneezing
- Nasal obstructions
- Head ache at times

Any previous treatment with other drugs was enquired and a thorough ENT check up was made as each case in the first instance. The status of the nasal mucous membrane was observed. Tenderness over the frontal and maxillary sinuses was elicited and the character of the discharge was noted. When there was no obvious discharge in the nose a history of purulent rhinorrhea, a radio gram of sinuses was obtained to investigate the state of sinus mucous membrane. Allergy, polyposis, hypertrophied turbinates was also noted along with the nasal lesion. Further an antral lavage was carried out if necessary. In each case the following things were directed to observe.

1. Earliest clinical response with neutraceutical.
2. Duration of treatment with neutraceutical sign to produce total improvement.
3. Smear (direct) and culture of the material obtained by a post nasal swab, before treatment with supplement.
4. Any ill effect of the drug.
5. Smear (direct) and culture of material obtained by a post nasal swab after treatment with supplement.

RESULTS AND DISCUSSION

Out of 17 cases with frank purulent sinusitis, 12 cases completely relived, One (case 13) improved partly (nasal discharge disappeared) 2 had no relief from the symptoms case (12 and 19) and 2 had no followup (case 2 and 3)

Clinical responses set in from the very next day of as in cases 4,5,8,10,18,20 to the 5th day as in case of 7, from beginning of treatment with neutraceutical. Total improvement occur in from 3-20 days. Discharge disappeared, mucus membrane returned to normal & bacteriologically they become sterile. In general case of sinusitis associated with allergy sign for longer causes of treatment there with out allergy 6,11,16 and 25. On an average required treatment with proposed neutraceutical for 11 day to the totally free from symptoms. Out of 17 cases of sinusitis 4 had associated allergy. 3 of the cases presented a history of allergic manifestation to Sulphonamide and penicillin (case 4,18,20). Both cases tolerated septilin without any undue manifestation were cured in 5 and 8 days respectively

This antral lavage +proposed neutraceutical gives a speedy recovery. The control series required repeated washing with the neutraceutical and lavage, Single puncture was necessary and often recovery set in by the next day.

Bacteriological sterility revealed by the smear and culture reports along with the clinical improvement. In 2 cases, the patient returned after about a fortnight with similar discharge as before case (16,25). But they recovered with a second course of septilin. This shows that there was at least no immediate resistance to the drug. No definite conclusion could be made for the duration of treatment required by case of Rhino-sinusitis with a badly deviated nasal septum or septic tonsils and those with out there accessory lesions. With the help neutraceutical in allergic rhinitis only 1 case (14) had considerable symptomatologic relief with in 2 days of treatment. The amount of watering and the nose of sneezing were reduced but did not disappear. Clinically

the nasal mucous membrane showed no evidence to return to normal.

The rest of cases (15,17,21) had no relief. Sense of nasal obstruction, watery rhinorrhea and the head ache persists. Cases (21,22,23,24,27,28) had a great relief with in 20 days in all aspects. The remaining cases show good response with in a month. None of the above cases however, become worse during the course of treatment. Neither total and different leucocytes nor the nasal cytology revealed any significant change.

In all cases (2 table spoonful of neutraceutical mixed with 10 ml of boiled water) have to be given initially for 3 days at an interval of 3 times a day before food. If the improvement was not appeared by third day, the supplement was continued till clinical improvement. Supplement can be discontinued as soon as the total clinical and bacteriologic improvement was noted, total improvement occurred with in 3-20 days. 2table spoonful mixed with 10 ml boiled water in empty stomach should be taken three times a day for 15 days; discontinued for 5 days and again continue for a month.

CONCLUSION

1. Proposed neutraceutical has a sterilizing effect on the organ of acute rhinitis.
2. Recovery is much speedier when treatment with neutraceutical +Anral lavage when compare to control.
3. Bacteriological sterility prevents due to clinical improvement.
4. This neutraceutical was useful in sulphonamide cases allergic to pencilline.
5. No drug resistance.
6. No toxic reaction during the course.
7. Proposed neutraceutical was found to be an useful one in the treatment of frank allergic rhinitis, throat infection.

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