



The Therapeutic Potential Of Rhus Toxicodendron For Acute Symptoms Post Drenching In Rain- An Observational Study

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Abstract:

Drenching in rain is often associated with the onset of acute symptoms, most commonly a respiratory disease complex, such as bronchitis, rhinitis, sinusitis. In fact, predisposition to respiratory infections through exposure to cold and wet conditions stems from the weakening of the body's immune defense. The purpose of this observational study is to assess the therapeutic potential of Rhus Toxicodendron in the treatment of acute symptoms post drenching in rain. Thirty patients from the OPD, IPD, and rural health centers of Sarada Krishna Homoeopathic Medical College, complaining of acute symptoms after exposure to rain were selected. The results were assessed in terms of pre-treatment and post-treatment changes in the SPGA score with Rhus Toxicodendron as the medicine prescribed. According to the research outcomes, a strong association between rain exposure and the exacerbation of respiratory diseases is established, with acute bronchitis being the most common diagnosis. Symptom prevalence in majority of cases was observed in patients of 1-15 and 46-60 years of age. The most common prescription potency being 200c; mostly 1-2 were the used doses. Statistical analysis with a paired t-test showed a highly significant reduction in symptom severity after the treatment. Thus, Rhus Toxicodendron proved to be an effective treatment for acute symptoms post drenching in rain. Further studies in bigger sample sizes with controlled trials may be recommended to strengthen these results and elucidate the biological mechanism involved.

Index Terms: Rhus Toxicodendron, Drenching in rain, Kanniyakumari, Acute Bronchitis, Respiratory diseases.

INTRODUCTION:

Exposure to rain and cold weather is most commonly associated with the onset of a variety of acute health conditions, most of which relate to the respiratory and musculoskeletal systems. One of the commonest scenarios would be that of drenching in rain, leading to an immediate fall of body temperature and possibly causing chain reactions in terms of physiological responses. Such reactions often worsen the symptoms, which include upper respiratory tract infections, exacerbation of bronchitis or asthma, besides the symptoms such as chills, arthritis, and muscular stiffness^(1,2).

From a Homoeopathic aspect, Rhus Toxicodendron has been employed traditionally in the treatment of symptoms of cold and dampness, particularly after drenching in the rain.^(3,4) Rhus Toxicodendron is especially prescribed for patients whose symptoms come about due to getting wet or even cold, such as often happens with those caught in a rainstorm⁽⁵⁾. Although it is much utilized in homeopathy, additional efforts should be put to perfect scientific validation for such a remedy, and it includes increasing demands for observational studies and clinical trials to determine its efficacy in the treatment of acute symptoms following rain exposure.

Weather-related respiratory diseases are very well described in medical literature. There is strong evidence regarding the association of sudden changes in the weather, mainly by exposure to rain, with the above symptoms of respiratory diseases, such as sore throat, cough, nasal congestion, and shortness of breath.^(6,7)

Given the prevalence of these conditions and that Rhus Toxicodendron has been used in homeopathy for many years, the purpose of this observational study is to explore the therapeutic potential of Rhus Toxicodendron in acute symptoms that arise after individuals are drenched in the rain. It would bridge the gap between traditional homeopathic treatments and contemporary clinical research with regard to this aspect of new insight into potential benefit for patients exposed to adverse weather conditions.

MATERIALS AND METHODS:

METHOD OF COLLECTION OF DATA: An observational study with a sample of 30 acute cases taken from the patients visiting the OPD, IPD, Rural centers, School health awareness programmes of Sarada Krishna Homoeopathic Medical College and Hospital, Kulasekharam.

INCLUSION CRITERIA: Patient of both sexes, all age groups, suffering from acute symptoms after drenching in rain were included in the study.

EXCLUSION CRITERIA: Patients suffering from other severe systemic diseases, patients with emergency acute conditions and patients requiring surgical intervention were excluded from the study.

STUDY DESIGN: Observational study.

RESULTS:

A total number of 30 cases were selected from all age groups. According to the study acute symptoms were more prevalent among the age groups 1-15 years and 46-60 years, as shown in Fig. 1., 11 cases were between the age group 1-15 years, 10 cases were between the age group 46-60 years. Fig. 2. shows that among the 30 cases in the study, 24 cases were reported from the Kanniyakumari district. Acute symptoms post drenching in rain is highly prevalent in the Kanniyakumari district. According to the data set it is observed that Acute Bronchitis has more association with drenching in rain as seen in 17 cases which is represented in Fig. 3. As seen in Fig. 4. in this study of 30 cases, maximum number of cases were given 200th potency which is about 17 cases. 1M potency was administered to about 12 cases. 30th potency was administered to 1 case. In this study of 30 cases doses such as 1, 2, 4, 5, 6, 7, 8, and 15 were administered. Among these most number of cases were administered 1 dose which is about 17 cases as represented in Fig. 5. Fig. 6. shows the marked improvement in the score before and after treatment in all the 30 cases.

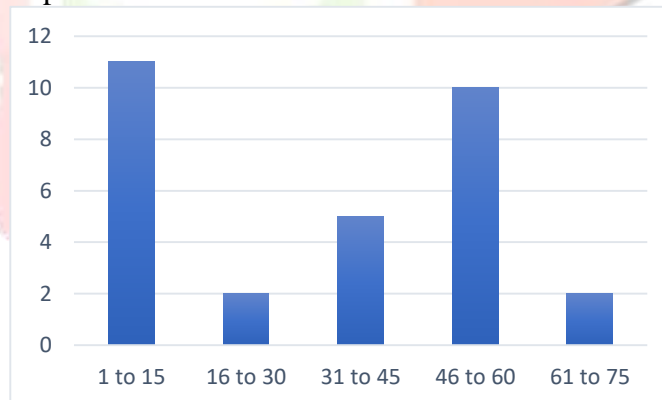


Fig. 1. Distribution of Cases Based on Age

In a sample of 30 cases taken, about 11 cases were between the age group 1-15 years, 10 cases were between the age group 46-60 years, 5 cases were between 31-45 years and 2 cases in the age group of 16-30 years and 61-75 years each.

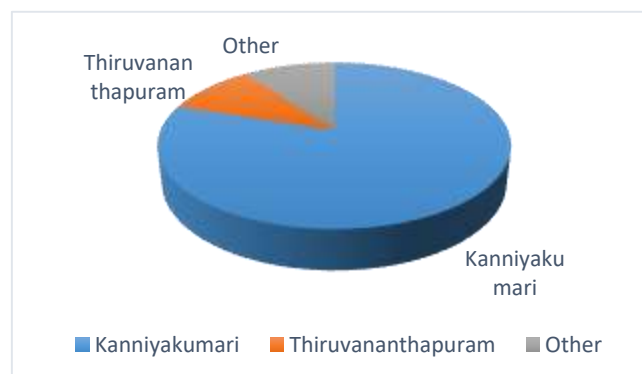


Fig. 2. Distribution of Cases Based on Districts

Among the 30 cases in the study, 24 cases were reported from the Kanniyakumari district. 3 cases from Thiruvananthapuram district. 3 cases from various other districts.

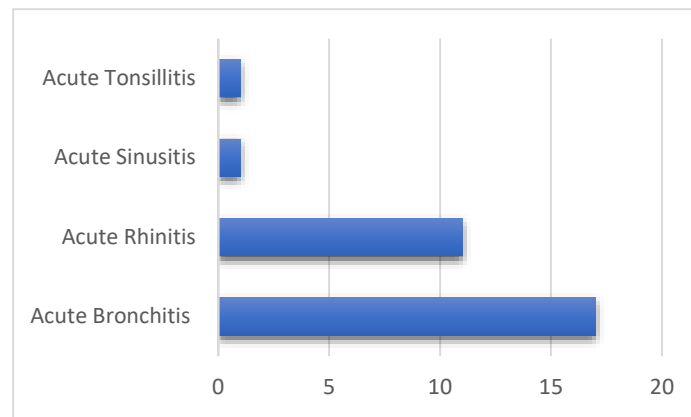


Fig. 3. Distribution of Cases Based on Diagnosis

In the study of 30 cases, maximum number of cases were diagnosed as Acute Bronchitis which is about 17 cases. Acute Rhinitis are 11 cases. Acute Tonsillitis and Acute Sinusitis with 1 case each.

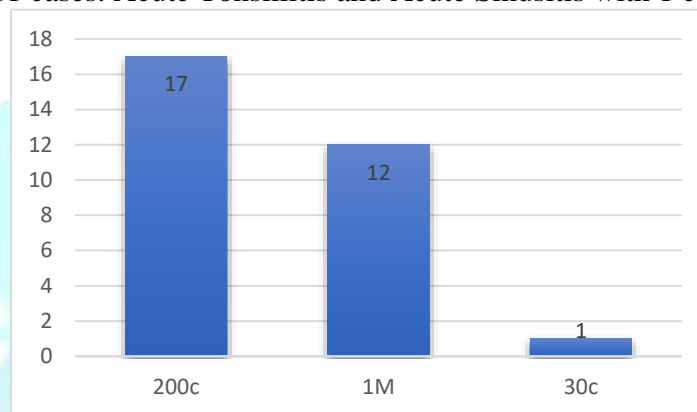


Fig. 4. Distribution of Cases Based on Potency

In this study of 30 cases, maximum number of cases were given 200th potency which is about 17 cases. 1M potency was administered to about 12 cases. 30th potency was administered to 1 case.

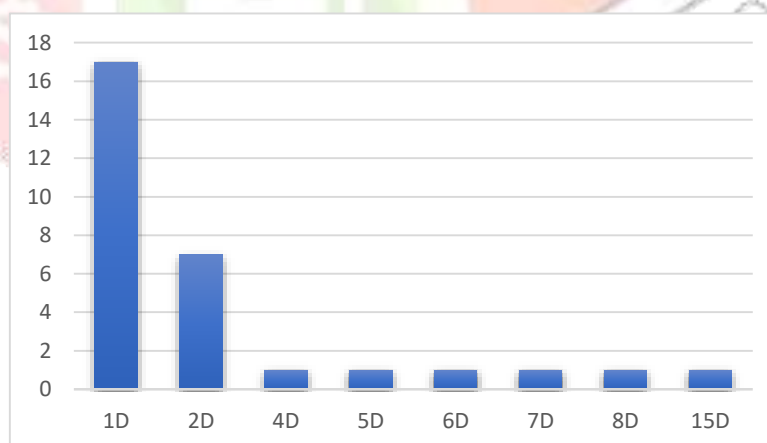


Fig. 5. Distribution of Cases Based on Dose Administered

In this study of 30 cases doses such as 1, 2, 4, 5, 6, 7, 8, and 15 were administered. Among these most number of cases were administered 1 dose which is about 17 cases. Following which is 2 doses which is about 6 cases. 4 doses, 5 doses, 6 doses, 7 doses, 8 doses and 15 doses were given in 1 case each.

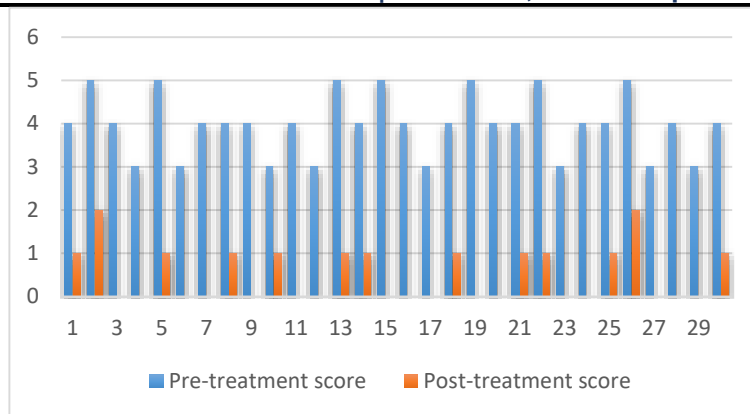


Fig. 6. Distribution of Cases Based on the Pre-treatment and Post-treatment Score

Table 1. Paired *t* test results

	X (Pre-treatment score)	Y (Post-treatment score)
Mean	3.97	0.50
Variance	0.72	0.63
Observations	30	30
Standard Error	0.13	0.11
df	29	
t	27.8639	
P two-tail	1.74611E-22	

The two-tailed P value is less than 0.0001. By conventional criteria this difference is considered to be statistically significant.

DISCUSSION:

The subjects of the study were selected from patients with acute symptoms post drenching in rain who attended the Out-patient department, In-patient department and Rural health centres of Sarada Krishna Homoeopathic Medical College as per the inclusion criteria. A total of 30 cases was taken where Rhus Toxicodendron was prescribed. Improvement of the patients was based on the general and symptomatic relief of the patient. For clinical assessment before and after treatment scores were assessed. Pre-treatment score and post treatment score were calculated. Paired 't' was applied to test the significance. This study was conducted for exploring the therapeutic potential of Rhus Toxicodendron for acute symptoms post drenching in rain.

According to the study, acute symptoms were more prevalent among the age groups 1-15 years and 46-60 years. Therefore the age groups mostly exposed to rain and drenched in rain is observed to be these age groups from this sample of 30 cases.

A study by Anand et al. ⁽⁸⁾ has reported an upward trend in the prevalence of diseases related to the respiratory system during and immediately after the monsoon period. During the rainy season there is a higher exposure to rain followed by onset of acute symptoms. This is thus confirmed by this observational study, as from among the 30 cases, 24 cases were from the Kanniyakumari district. It also correlates with a study by Thomas et al. ⁽⁹⁾ which reports that people living in the Kanniyakumari district have a weakened immunity due to the overall humidity and sudden changes in temperature from heavy rainfall which makes them more susceptible to developing acute symptoms and infections after drenching in rain.

A study by Murdoch et al. ⁽²⁾ shows that drenching in rain is a well established trigger for respiratory symptoms. Researches by Thomas et al. ⁽⁶⁾ and Sharma et al. ⁽¹⁰⁾ have proved that rain alone and also associated with chill winds or humidity can result in the onset in the onset of respiratory disorders including common cold, bronchitis, asthma, exacerbations of COPD, etc. This evidence has been strengthened further by this study in which acute symptoms of bronchitis, rhinitis, tonsillitis and sinusitis have been developed among the 30 patients after drenching in rain. Therefore this confirms with the existing literature regarding the association between drenching in rain and respiratory symptoms.

In this study of 30 cases, maximum number of cases were given 200th potency which is about 17 cases. The selection of potency was based on the susceptibility of the patient. Among the 30 cases most number of cases were administered 1 dose which is about 17 cases. In this study all 30 cases showed marked improvement in the score before and after treatment. The intensity of the symptoms were reduced to a great extent.

CONCLUSION:

This observational study provides substantial evidence of the therapeutic potential of Rhus Toxicodendron in treating acute symptoms post drenching in rain. The scores in SPGA revealed a statistically significant reduction from the pre-treatment to post-treatment phase. Improvement was more significant in conditions such as acute bronchitis and rhinitis, both of which are aggravated by cold and damp exposure. For future research, larger, multicenter randomized controlled trials must be performed to establish the efficacy of Rhus Toxicodendron in a large population.

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Declaration of patient consent: The authors obtained written informed consent from the concerned patient to publish case records.

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Conflict of interest: There is no conflict of interest.

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