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A Case Report on the Effects of Onion Steam Vapour/Nebulisation and T-AYU-HM Premium Tablets in Covid-19 Patient

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ABSTRACT

Currently, every nation is passing through a tough phase because of Covid-19. Traditional system of medicine definitely has potential to help in fighting against this covid-19 pandemic. Boosting immunity has gained much attention during these days and people are receiving multiple options for the same. Complications and treatment of patients of Covid-19 having comorbidities presents a major challenge in current timings. In this article, we present a clinical case study of a 51-year-old male weighing 73.60 kg, complaining of fever, cough, cold, breathing difficulty, weakness, loss of taste sensation and vertigo. He also had a history of Type II Diabetes Mellitus and was on Glimi-M twice a day. He was suspected of being infected by Covid-19. During his home quarantine tenure, we advised him to take onion nebulisation and tablet T-AYU-HM Premium 300mg twice a day for 15 days. On his follow up visit, we observed a remarkable improvement in his ESR, CRP and white blood cell count. He showed 20-30 percent involvement of lungs in HRCT Chest conducted on the 5th day of his treatment. His SpO₂ and Body Temperature maintained normal levels throughout all 10 days of observation period. Tablet Levocetirizine 5mg with Montelukast 10mg was added as a supportive medication and Tablet Paracetamol 650mg was advised to be given only when he had fever above 100°F. We observed proper home quarantine measures and treatment with Onion steam vapour/Nebulisation and T-AYU-HM Premium does show a remarkable effect in reducing the clinical and pathological sign and symptoms of the patient.

KEY WORDS: Covid-19, Onion Stem Vapour/Nebulisation, T-AYU-HM Premium, ESR, CRP

INTRODUCTION

Currently, entire world is suffering from Covid-19 pandemic. No doubt many clinical trials of vaccines are ongoing but no standard care for the cure of corona virus is available till date. [1, 2] Many herbal products are gaining entry into the market with the purpose of boosting immunity in Covid-19 patients. Increasing cases demand some effective and affordable treatment for the patients. Increasing cases are not actually the problem but how fast the asymptomatic patients are transmitting the virus to one another is a major concern. The major purpose of

managing mild and moderate level patients through traditional system of medicine is to prevent them from moderate to severe conditions and complications. Early isolation, early diagnosis, and early management might collectively contribute to the better control of this disease and its outcome. Eating healthy food and sanitizing regularly is always beneficial in current pandemic situation. [1, 2] A person needs to be very much informed and aware about the importance of various available immunity boosters in market before their excessive consumption for safety concern. [3]

T-AYU-HM Premium is an Ayush Standard Mark anti sickling formulation. Various preliminary studies have already been performed on this formulation proving its safety and efficacy. The ingredients in the formulations serve as an antioxidant and also help in the absorption of iron. The formulation has potential in preventing dysregulation of Gardos channels. The actual mechanism of maintaining membrane integrity of the red blood corpuscles might help in restoring oxygen demand in the body and preventing complications. [1, 2, 4-5] Onion is the most popular vegetable which has a proven study data indicating its action on angiotensin-II enzyme and preventing endothelial dysfunction. [6]

CASE STUDY

The case study was conducted at Dhanvantari Clinic-Ayurvedic Health Care and Research Centre, Vyara. The consent from patients was received before progressing towards case report. In our observational case study, we have reported a 51 year old male, 73.60 kg in weight with complaints of fever, cough, cold, breathing difficulty, weakness, loss of taste sensation and vertigo. He was suspected of being infected by Corona Virus. On initial consultation, we advised him strict home quarantine.

Table 1. Clinical parameters of the patient reported during treatment.

Investigation	Day 1	Day 5	Day 10
Hb (gm/dl)	14.4	15.3	15.2
RBC(millions/microlitre)	4.28	4.68	4.56
WBC(10 ³ /microlitre)	9200	7000	9800
Platelets(per microlitre)	205000	19900	377000
ESR(mm/hr)	36	94	40
CRP(mg/l)	9.4	167.3	9.5
D-dimer (ng/ml)	-	-	323.3
RBS (mg/dl)	105	129	-
HbA1c (%)	7.65	-	-
B.P (mmHg)	130/72	120/70	126/80
BT (°F)	97.5	97.3	97.7
SpO2 (%)	97	99	97
PR (rate/minute)	96	94	82
Weight(in kg)	73.6	70.49	69.9
HRCT	-	20-30 % lung-involvement (co-RADS-50)	

During his home quarantine tenure we advised him to take onion nebulisation and tablet T-AYU-HM Premium 300 mg twice a day for 15 days. On 5th day HRCT Chest was

conducted and it showed 20-30% lung involvement. On his follow up visit, we observed a remarkable improvement in his ESR, CRP and white blood cell count. The observation table of his clinical reports have been mentioned in below table.1

Tablet Levocetirizine 5mg with Montelukast 10mg was added as a supportive medication and Tablet Paracetamol 650mg was advised to be given only when he had fever above 100°F. He also had a history of Type II Diabetes Mellitus and was on Glimi-M twice a day. His blood glucose levels were regularly measured and maintained under normal range during the treatment in order to avoid complications due to co morbid condition diabetes mellitus. We observed proper home quarantine measures and treatment with onion vaporisation and T-AYU-HM Premium tablets (300 mg twice a day) does make a remarkable impact in reducing the clinical and pathological sign and symptoms of patient.

RESULT AND DISCUSSION

The patient has reported sustained SpO2 levels during the course of his treatment which might be one of the most important indices because the level of oxygen in blood >93 percent is suggestive for lesser incidence of hospitalisation and further complications.[7] The other haematological parameters like C-reactive protein synthesised by liver in response of inflammation is considered as an important serum biomarker in covid-19.[8,9] The elevated level of CRP is considered as disease progression from mild to moderate and then to the severe forms. The current case follow up, suggest that the level of CRP on 10th day of observation has reduced remarkably which is suggestive of reduction in inflammation. Just like CRP another positively correlated biomarkers in covid-19 progression is ESR, IL-6 and PCT. [10] Even though ESR is a non-specific inflammatory marker but severe cases were observed with higher levels of ESR. As the condition get severe more chances of inflammation are there also factors such as age and comorbidities are involved. Generally, it should be half of a patients age is considered normal. [11] The observed case report also suggests that the drug T-AYU-HM premium due its membrane stabilising effect prevents lysis of red blood corpuscles and hence prevent the rise in ESR. This might prove to be the more vital as preventing the lysis of red blood corpuscles will eventually help in sustaining the level of oxygen in blood. Studies on clinical prognosis in covid-19 have mentioned that D-dimer level increases in synchrony with CRP. Generally, patients of Covid-19 have increased D-dimer level. [12, 13] Various studies have

mentioned that D-dimer level should be monitored for predicting the requirement of anticoagulant therapy. T-AYU-HM premium might have played a role in preventing thrombus formation and platelet aggregation. [5] Observation of heart rate and radial pulse also suggested that load on cardiovascular system has been reduced. Monitoring of serum ferritin in case of covid-19 might be more beneficial to assess the disease progression and T-AYU-HM premium can be definitely considered for regulating iron balance. [14] Studies have already mentioned that patients of Covid-19 with comorbidities have chances of more clinical complications. [15] Diabetes and other comorbidities are significant predictors of morbidity and mortality in patients with COVID-19. [15] Maintaining normal glucose levels in diabetics during the treatment is very crucial.

CONCLUSION

The purpose of conveying the knowledge observed in alternative medicine which may lead to further research for better patient outcomes. Current pandemic demand lot of such kind of case report observations for providing sufficient information regarding possibilities of further research. The patient during our 10 days of observation presents remarkable improvement in his clinical and pathological conditions. Further clinical investigation in more patients is required to prove the efficacy of this combination of T-AYU-HM Premium tablets and Onion nebulisation treatment in Covid-19.

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CONFLICT OF INTEREST

The authors affirm there is no conflict of interest associated with this work.

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