

Case report of COVID-19 in a Hypertensive patient: Ayurvedic add on therapy

Case Report

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Abstract

COVID-19 has affected negatively day to day life and global economy. Considering need for search of immunity modulator drugs for fighting this virus, Ayurvedic treatment was planned. 30 year old female patient, having history of the hypertension was diagnosed as a case of COVID-19 through RT-PCR. AYUSH *Kwath* (20 ml OD for 7 days), *Sanshamani vati*(2BD for 7 days), *Sudarshan churn* (3gm for 14 days), Vit -C and Azithromycin given orally for 5 days. RT-PCR sample result was found COVID negative on 7th day of treatment. Antipyretic, anti-inflammatory, immune-modulatory activities were documented earlier of used medications which have shown beneficial result in present case also. Orally administered, add on Ayurvedic formulation exerted symptomatic relief in symptomatic COVID-19 case with *pitta-kapha prakriti* having co-morbidity of Hypertension. RCT needs to be conducted to validate result in larger sample which will generate evidence for support.

Key Words: Ayurveda, AYUSH *Kwath*, COVID-19, *Sanshamani vati*, *Sudarshan churn*.

Introduction

COVID-19 has affected negatively day to day life and global economy. Globally, as of 20 February 2021, there have been 110,224,709 confirmed cases of COVID-19, including 2,441,901 deaths, reported to WHO(1). Considering need for search of immunity boosting drugs for fighting this virus, Ayurvedic treatment was planned.

Case Report

30 year old female patient, doctor by profession, residing in Rohtak, Haryana, presented complaints of fever and bodyache since two days. On third day, there was development of loss of taste, smell. Other symptoms were headache and fatigue on and off. She had history of the hypertension last 4 years (on medication named Amlodipine 5mg, Bisoprolol 5mg). Study is carried out as per Declaration of Helsinki and consent form was taken before starting study.

Family history

NAD, Addiction: Tea (two cup two times a day).

Past history

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Exposure to COVID-19 positive patient. Migraine from 10 yrs (not on medications).

Physical examination

Temp -103^o F, tonsillar Cervical adenopathy was present.

- *Ashtavidha Pariksha*:
- *Nadi* (pulse) - *Vatpradhan-pitta*,
- *Jihva* (tongue) - *Malavritta*,
- *Mala* (stool) was *Nirama*,
- *Mutra* (urine) was yellow,
- *Shabda* (speech) - *hoarse*,
- *Sparsa* (touch) - *ushna*,
- *Drika* (eyes) - *panduta*,
- *Akriti* (body built) - *madhyam*.
- *Prakriti* (constitution) of patient was *kapha-pittaja*,
- *Vikriti* (pathogenesis) was *Vata-pitta dominant tridoshaj*,
- *Sara* was *rakta sar*,
- *Samhana* (body composition): *medium* and
- *Vyayam Shakti* (exercise capacity) was *madhyam*,
- *Vaya*: *Yuva*,
- *Ahara Shakti*,
- *Satva*, *Satyama*, *Bala* (strength) were found *Madhyam*,
- *Jarana Shakti* (digestion capacity),
- *Agni* (metabolism) was *manda* (decreased) during *Dashvidha Pariksha*.
- *Investigations*: *RT-PCR*

Diagnostic Focus and Assessment

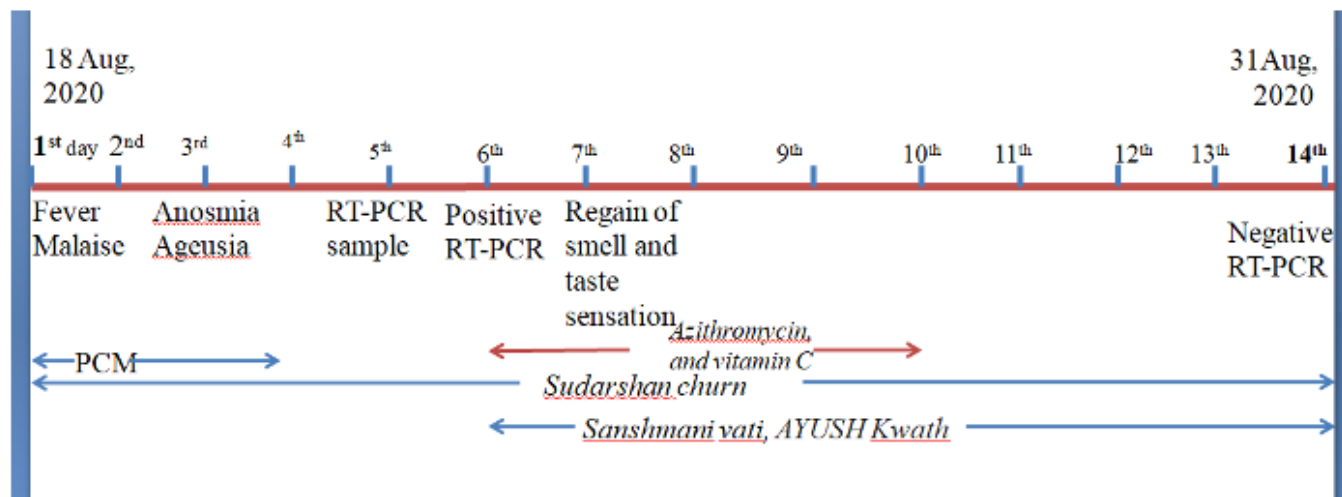
RT-PCR result was positive when the nasal swab sample was tested.

Intervention given

AYUSH Kwath- 20 ml OD for 7 days, Sanshamani vati 2BD for 7 days, Sudarshan churn for 14 days, Vit -C and Azithromycin given orally for 5 days.

Timeline

Figure 1: Timeline showing the result of Ayurvedic formulations on COVID-19 as add-on therapy



Follow up and outcome

Table 1: (Showing daily observations of vitals and others)

	24-08-21	25-08-21	26-08-21	27-08-21	28-08-21	29-08-21	30-08-21
BP	130/90 mmHg	124/90 mmHg	130/90 mmHg	130/90 mmHg	130/90 mmHg	130/90 mmHg	130/90 mmHg
PR	85/min	80/min	82/min	80/min	80/min	80/min	78/min
SPO2	96%	96%	98%	98%	98%	98%	98%
Temperature	103 ^o F	102 ^o F	102 ^o F	100 ^o F	99.8 ^o F	99 ^o F	98.3 ^o F
RT-PCR	Positive	-	-	-	-	-	Negative

RT-PCR sample result was found COVID negative on 7th day after treatment. Adherence and tolerability of intervention was assessed by the patient. There was no adverse event during treatment.

Discussion

This case was considered as significant because of fast activity of medicines in turning the positive patient with co-morbidity of HTN to negative was found. It was attempted to de-convolute the pathogenesis in the COVID-19 of the patient with multiple formulation.

Disease pathology and its Ayurvedic correlation with *Sannipatika jwara* in patient can be understood with presenting symptoms like coughing, fever etc.

Mechanism of used medications can be understood by following documented evidence.

Antipyretic(2), anti-inflammatory(3), immunomodulatory(4) activity of *Guduchi ghana vati* and beneficial effect in asymptomatic Covid-19 patients(5) documented in studies.

AYUSH Kwath herbal formulation not only modulated the pathways (HIF-1, p53, PI3K-Akt, MAPK, cAMP, Ras, Wnt, NF-kappa B, IL-17, TNF, and cGMP-PKG) related to boost the immune system but also modulated the multiple pathways that are

contributing in the progression of multiple disease pathogenesis which would add the beneficial effect in the special subjects like patients from hypertension and diabetes in which 4-hydroxychloroquine therapeutic approach cannot be made(6).

Antipyretic effect(7),(8) of *Sudarshan churn* and its validation along anti-microbial effect through HPTLC(9), anti-oxidant potential, anti-inflammatory effect, analgesic effect, antihistamine effect (7) is well understood.

Presented Ayurvedic treatment for 7 days ameliorated the symptoms without any side effect along with change in RT-PCR. This case needs to be supported by further diagnostic findings.

In further studies, there is need to validate the findings with deeper insights.

Conclusion

Orally administered, add on Ayurvedic formulation exerted symptomatic relief in symptomatic COVID-19 case with *pitta-kapha prakriti* having

comorbidity of hypertension. RCT needs to be conducted to validate result in larger sample which will generate evidence for support.

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