# Homeopathic Treatment in Patients with COVID-19: Analysis of Clinical Evolution and Comparison between Cases in 2020 and 2021

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#### **Abstract**

**Background** The manifestations of coronavirus disease 2019 (COVID-19) can result in several prognoses and lead patients to look for appropriate complementary or alternative treatment options according to their personal situation and available health care. Patients with mild symptoms or those who have not yet reached the maximum severity of their condition are those who seek outpatient care, where homeopathic treatment might be considered, given the well documented history of this medical system in several epidemics in the past.

**Objective** The aim of this study was to compare the homeopathic treatment used for symptomatic cases of COVID-19 in March and April 2020 with cases treated in March and April 2021.

Method This is a retrospective observational study based on the analysis of the medical records of symptomatic COVID-19 patients treated on an outpatient basis with homeopathy at the Hahnemanniano George Galvão Institute in São Paulo, Brazil. We analyzed 54 cases, divided into two samples (27 cases in each year), similar in relation to age, gender and origin of the patients.

**Results** The development was distinct in the 2 years, with improvement of symptoms after 3 days of the first homeopathic prescription in 2020 whilst in 2021 the improvement occurred from the sixth day onward. The most frequently prescribed homeopathic medicine also differed in the two samples (Antimonium tartaricum in 2020; Arsenicum album in 2021), which indicates the different disease characteristics at these two moments of the epidemic.

#### **Keywords**

- homeopathy
- ► COVID-19
- Arsenicum album
- ► Antimonium tartaricum

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**Conclusion** In 2020, the symptomatology of the cases was mainly acute and the main medicine was *Antimonium tartaricum*. By comparison, in 2021 a greater interference from individuals' previous chronic miasmatic disease may explain the change in the main medicines used that year, with *Arsenicum album* being the most prescribed in the cases studied.

#### Introduction

The use of homeopathy in epidemics throughout history is well documented. Hahnemann, creator of this medical system, faced some epidemics during the 19th century in Germany, such as scarlet fever, <sup>1,2</sup> miliary purpura, <sup>3</sup> typhus, <sup>4</sup> and cholera. <sup>5,6</sup> In 1854, in Great Britain, homeopathy also proved to be efficient in the cholera epidemic, showing the same result in the diphtheria epidemic in the United States between 1862 and 1864 and in the Spanish flu pandemic in 1918. <sup>7</sup>

In Brazil, homeopathy was used in the epidemics of scarlet fever (Rio de Janeiro, 1849), yellow fever (Bahia, 1850 and Rio de Janeiro, 1870, 1873, 1875 and 1877), cholera (Pará, 1855 and Recife, 1856), bubonic plague (Rio de Janeiro, 1900), smallpox (Bahia, 1918) and typhus (Bahia, 1925). In all these interventions, there was evidence that homeopathy was beneficial to the population, reducing morbidity and mortality.<sup>7</sup> In 1974 it was used in the meningitis epidemic in Guaratinguetá, where Dr. David Castro and Dr. Galvão Nogueira used Meningococcinum 10cH to medicate 18,640 people under 15 years old (approximately 74% of the population at risk). The effectiveness of the medicine was reported as 90%, with international repercussions.<sup>8</sup> Also, in the fight against meningitis in Blumenau (1998), Meningococcinum 30cH was used in 65,826 people and only four developed the disease; in the control group of 23,532 people, there were 20 cases of meningitis.8

More recently, in 2007, during the dengue epidemic in Penápolis/SP, China officinalis 30cH was administered in a single dose as a prophylactic medicine for the most severe forms of the disease. A total of 12,182 people (21.5% of the population) were medicated by the Hahnemanniano George Galvão Institute (IHGG), with a reduction in the incidence of dengue of 66% compared with the control group, suggesting the positive effectiveness of the medicine.<sup>8</sup> In 2010, this same medicine was again used in the dengue epidemic in cities in the states of São Paulo and Goiás, in partnership with the Municipal Health Departments of these places.8 In Penápolis, 21,334 people (37% of the population) were medicated, with a reported effectiveness of 54%; in Pereira Barreto, 17,715 people (72% of the population) received the medicine, with a reported effectiveness of 71%. In the municipality of Iporá, 22,559 people (72% of the population) were medicated, with a reported effectiveness of 93.5%, putting the city in seventh place in number of cases in the state of Goiás from 26th after 2 months of the homeopathy campaign, while in the rest of the state the rates continued to rise, reaching 365% in the neighboring city of Jussara.8 In addition to the reported effectiveness, there was less morbidity (mild disease) in the medicated groups, and also the acute cases of manifested disease treated by homeopathic physicians were cured rapidly.

Based on these outcomes, it was intended to record the results of homeopathic treatment during the current coronavirus disease 2019 (COVID-19) pandemic, performed according to Hahnemann's homeopathic guidelines and principles. It is known that the clinical manifestations of COVID-19 are varied<sup>9-11</sup> and that the disease most typically has three stages with different symptoms<sup>11</sup> described below:

- First stage (1st to 4th day): Onset with sore throat, anosmia, decreased or loss of appetite, diarrhea or mild vomiting, and then development of fever, fatigue, muscle aches and dry cough.
- Second stage (5th to 7th day): The patient may develop respiratory symptoms or pneumonia and may require hospitalization, especially if he or she has an underlying disease such as diabetes, hypertension, obesity, or any other systemic disease that reduces immunity.
- Third stage (8th to 10th day): Some patients move to this stage, with a high chance of developing severe acute respiratory syndrome and may need admission to an intensive care unit.

Patients who seek outpatient care are those with milder symptoms, or those who have not yet progressed to the maximum severity of their condition. According to statistics, <sup>12</sup> these patients are considered the majority affected by COVID-19, having symptoms compatible with stages 1 and 2 of the disease.

The objective of this study was to compare the outpatient homeopathic treatment of symptomatic cases of COVID-19 at the IHGG São Paulo, in March and April 2020 with symptomatic cases treated at the same institution in March and April 2021.

### Methods

This was a retrospective observational study based on the analysis of the medical records of patients with compatible symptomatology for COVID-19 and with positive results in the RT-PCR test in real time (reverse transcription followed by polymerase chain reaction, which is the recommended method for the laboratory diagnosis of COVID-19<sup>13,14</sup>) during the period March to April 2020 inclusive and in the same months of 2021. For the purposes of study homogeneity, a medical record with incompletely recorded data was an exclusion criterion.

The selected cases refer to patients of the IHGG who received individualized homeopathic treatment during the acute disease, performed in a home isolation regimen. In each case, only one single-component homeopathic medicinal product was prescribed at a time, chosen according to the symptoms presented. In a situation in which there was a change in symptoms during the evolution of the condition, it was necessary to change the prescribed medicine, and these different medicines were used sequentially, never simultaneously. All patients were followed up until evident clinical improvement. No adverse events were observed, and patients recovered with resolution of the condition. In none of the cases was hospitalization required.

Fifty-four medical records were selected, with an equal number of patients in the 2 years. Of the 27 cases studied in 2020, 81.48% were female and 18.52% male, with a mean age of 53 years, with five patients aged 65 years or older. In 2021, of the 27 cases analyzed, 70.37% were female and 29.63% male, with a mean age of 45 years, with two patients over 65 years of age. None of these data shows a statistically significant difference between the two groups (p > 0.05). There were no pediatric cases or pregnant women, and all patients came from São Paulo.

The variables researched in the two samples were: age, gender, origin, symptoms present at the beginning and during the evolution of the condition, duration and medications prescribed during the acute stage.

After selecting the clinical records, the data were collected, tabulated and analyzed in spreadsheets using Microsoft Excel, recording the symptoms and medications prescribed every 3 days, with Day 0 (D0) being the day of the initial consultation on which the patients were evaluated and when they received the homeopathic medicine. D3 was the third day after the initial consultation; D6 was the sixth day, and so on. Records were kept until the patient did not present any more complaints regarding the acute disease.

Statistical analysis was performed using GraphPad Prism software (GraphPad Software, Inc., San Diego, California, United States) and data Normality was evaluated using Fisher's Exact Test.

Each patient included in this study gave his/her consent for the use of their data by signing the Free and Informed Consent Form (Supplementary File 1, available online only), containing all the information in a clear and detailed manner.

This study is in line with resolution 466/2012 of the National Health Council of Brazil and was approved by the Ethics and Research Committee of the Institute of Biomedical Sciences of the University of São Paulo (registration number: 4995641).

## Results

► Table 1 refers to the frequency of symptoms in the analyzed cases. Both in the 2020 and 2021 samples, symptoms were divided into groups according to their presence on the day the patients were evaluated (D0). There were three groups of symptoms for each sample, based on the calculation of the mean and standard deviation: Group 1 (G1), highly frequent

symptoms; Group 2 (G2), moderately frequent symptoms; Group 3 (G3), uncommon symptoms.

In the months of 2020, there was a statistically significant reduction (p < 0.001) in the frequency of symptoms presented during the study period, from the initial day of the evaluation (on D0, a total of 196 symptoms present) to the ninth day, considering the total groups (G1, G2 and G3). There was improvement in the symptoms from the third day onward and resolution of the condition on the 9th day, with 82% of patients without clinical symptoms (>Fig. 1).

Considering the division into three frequency groups (>Fig. 1), in G1 there was a statistically significant and progressive reduction in the number of symptoms as the days passed (p < 0.001). In G2, this reduction was only significant from the 6th day onward (D6), with p < 0.001 between D3 and D6. These data show real improvement in symptoms that appeared in moderate frequency (G2) in the first evaluation (D0) from the 6th day onward after the beginning of the homeopathic medication, whilst the symptoms with high frequency (G1) in D0 had significant improvement already on the third day onward after the medication. The symptoms belonging to G3 only had a significant reduction in the frequencies between D0 and D3 (p = 0.0097), showing improvement on the third day onward after homeopathic medication. From D3, the improvement was not significant: these symptoms persisted.

In the analyzed cases from March and April 2021, in general, without considering the frequency groups of symptoms, there was a statistically significant reduction in the presence of symptoms from the sixth day onward after homeopathic medicine administration (D6), with p < 0.001. On D0 there were a total of 148 symptoms present and on D15 88% of the patients did not present more symptoms related to the acute disease in question, as shown in ►Fig. 2.

Considering the division in the three frequency groups (**>Fig. 2**), in G1 there was a statistically significant reduction in the number of symptoms from the sixth day onward (between D0 and D6, p = 0.0003; between D6 and D9, p = 0.0074). In the group of symptoms that appeared in moderate frequency (G2), a significant reduction in the number of symptoms also occurred from the sixth day onward (between D0 and D6: p = 0.0306), with exponential decrease. The symptoms belonging to G3 only had a significant reduction in their frequencies from the 12th day on, being p = 0.0215 between D0 and D12.

► Figs. 3, 4, 5 and 6 show the compared results of the two samples (2020 and 2021).

Considering the total symptoms of each sample, there was a highly significant difference (p < 0.001) in the reduction of symptoms between the two samples from the third day onward after the use of the homeopathic medicine, with a greater decrease in the number of symptoms between D0 and D3 in the sample of 2020 compared with 2021 (**Fig. 3**).

The curves of the two samples have different patterns, observing that in 2021 the decrease was smaller (► Figs. 3–5 and 6).

For patients whose data were analyzed in either 2020 or 2021, there were no adverse events observed after the

**Table 1** Frequency of symptoms presented by patients treated with homeopathy by IHGG in the period from March to April 2020 and in the same months of 2021, diagnosed with COVID-19, on the day of the initial evaluation (D0), State of São Paulo, 2021

Frequency of symptoms	Symptoms on D0: 2020 cases			Symptoms on D0: 2021 cases		
	Symptoms	N	%	Symptoms	N	%
Group 1 (G1) Highly common symptoms	Fatigue, weakness	25	92.59	Headache	21	77.78
	Dry cough	22	81.48	Fatigue, weakness	18	66.67
	Headache	18	66.67	Muscle pain	14	51.85
	Fever	17	62.96	Dry cough	13	48.15
	Mild/moderate dyspnea <sup>a</sup>	16	59.26	Fever	11	40.74
	Chest pain	15	55.56	Nasal obstruction	10	37.04
Group 2 (G2) Moderately common symptoms	Anosmia and/or ageusia	9	33.33	Mild/moderate dyspnea <sup>a</sup>	7	25.93
	Sore throat	9	33.33	Throat irritation	6	22.22
	Nasal obstruction	9	33.33	Chest pain	5	18.52
	Muscle pain	8	29.63	Prostration	5	18.52
	Secretion in the throat	8	29.63	Dizziness	5	18.52
	Chills	7	25.93	Chills	4	14.81
	Bone and muscle pain	6	22.22	Sore throat	4	14.81
				Runny nose	3	11.11
				Palpitation	3	11.11
				Secretion in the throat	3	11.11
Group 3 (G3) Uncommon symptoms	Severe dyspnea <sup>a</sup>	5	18.52	Anosmia and/or ageusia	2	7.41
	Abdominal pain	5	18.52	Abdominal pain	2	7.41
	Dizziness	5	18.52	Increased sweating	2	7.41
	Diarrhea	4	14.81	Vomit	2	7.41
	Prostration	4	14.81	Bitter taste in mouth	1	3.70
	Conjunctivitis	2	7.41	Conjunctivitis	1	3.70
	Hypothermia	1	3.70	Diarrhea	1	3.70
	Vomit	1	3.70	Severe dyspnea <sup>a</sup>	1	3.70
	Skin lesions	0	0.00	Low back pain	1	3.70
				Bone and muscle pain	1	3.70
				Hypothermia	1	3.70
				Tinnitus	1	3.70
				Skin lesions	0	0.00
				Paresthesia	0	0.00

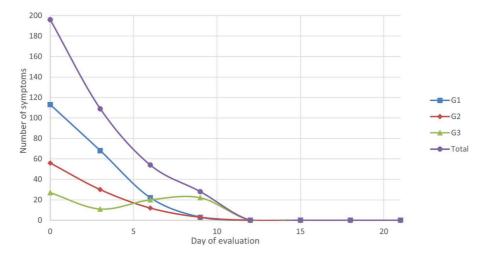
<sup>&</sup>lt;sup>a</sup>Classification of dyspnea intensity according to the Modified Borg Scale. <sup>16</sup>

administration of the homeopathic medicines, a result similar to the study by Valeri et al, 12 with good recovery of all patients.

In the 2020 sample, the medicines prescribed during the course of acute illness were: Antimonium tartaricum (Ant-t), Arsenicum album (Ars), Bryonia alba (Bry), Phosphorus (Phos) and Pulsatilla nigricans (Puls). In 2021, the following medicines were administered: Ant-t, Ars, Bry, Mercurius solubilis (Merc), Nux vomica (Nux), Phos and Puls. In the total analysis of the frequencies of medicine prescriptions, there was no statistically significant difference between them in the two studied samples.

In 2020, Ant-t was the most frequently prescribed medicine (59.26%, with p = 0.0047 between Ant-t and Ars) on the third day of evaluation (D3), from which significant clinical improvement was identified among the patients in this sample. On D9, 22 of the 27 patients analyzed did not present any more symptoms. Thus, the medicine that was prescribed more frequently preceding the resolution of the condition—that is, the one administered in higher percentage in D6—was Ant-t (78.6% of the prescriptions, being administered in 11 of the 14 patients who still had symptoms on D6).

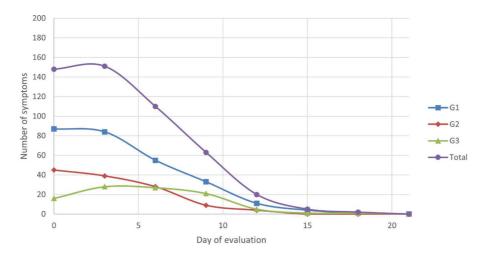
Among the patients studied in 2021, the clinical improvement was significant from the sixth day of evaluation onward



G1 (Group 1): Highly common symptoms on D0; G2 (Group 2): Moderately frequent

symptoms on D0; G3 (Group 3): Uncommon symptoms on D0.

Fig. 1 Behavior of the frequency of symptoms presented by patients with COVID-19 treated with homeopathy by IHGG from March to April 2020, from the first day of evaluation (D0) to the ninth day (D9), State of São Paulo, 2021.



G1 (Group 1): Highly common symptoms on D0; G2 (Group 2): Moderately frequent

symptoms on D0; G3 (Group 3): Uncommon symptoms on D0.

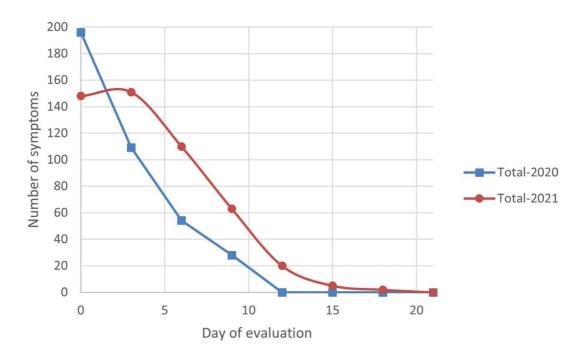
Fig. 2 Behavior of the frequency of symptoms presented by patients with COVID-19 treated with homeopathy by IHGG from March to April 2021, from the first day of evaluation (D0) to the 21st day (D21), State of São Paulo, 2021.

(D6), so that on D15 24 of the 27 patients presented no symptoms. The medicine prescribed most frequently preceding the resolution of the condition—that is, the one administered in higher percentage in D12-was Ars (administered in six of the 12 patients that still had symptoms on D12).

The frequency of administration of Ant-t before the resolution of the condition (i.e., on D6) has no statistically significant difference (p = 0.2177) compared with the frequency of Ars in 2021 on D12 (day of the last prescription before the resolution of the case). Fig. 7 shows the frequency of administration of the medicine related to the clinical resolution of acute conditions in the two studied samples, with Ant-t being the medicine referred to in 2020 and Ars in 2021.

#### Discussion

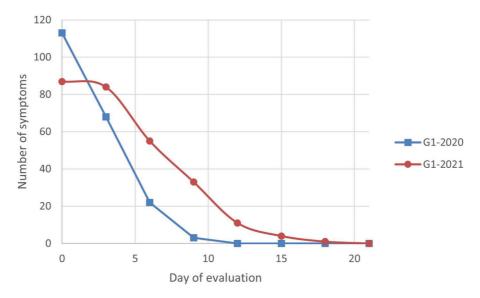
In the 2020 sample, the symptoms that appeared with low frequency on the first day of evaluation (G3) did not show significant improvement from D3 onward, so that these symptoms persisted, probably due to an elimination process according to Hering's Law or due to the possibility of the acute disease having merged with the chronic miasmatic disease previously present in the individual, according to Hahnemann's reasoning in paragraph 242 of his work "Organon of the Art of Healing". 15 Chronic miasmatic disease, in most cases, is associated with these symptoms and they continue their course, but not characterized as an acute disease anymore and becoming a chronic case, considered



Total-2020: Total symptoms present in the 2020 sample; Total -2021: Total symptoms

## present in the 2021 sample.

**Fig. 3** Behavior of the frequency of symptoms presented by patients with COVID-19 treated with homeopathy by IHGG from March to April 2020 and in the same months of 2021, from the first day of evaluation (D0) to the 21<sup>st</sup> day (D21), State of São Paulo, 2021.



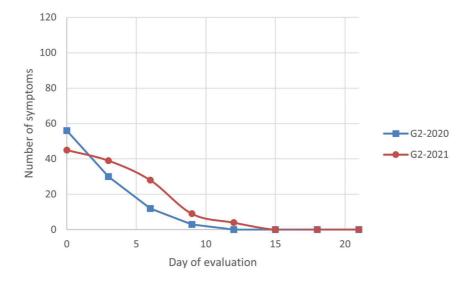
G1-2020: Highly frequent symptoms in the 2020 sample; G1-2021: Highly frequent

symptoms in the 2021 sample.

**Fig. 4** Behavior of the group of highly frequent symptoms (G1) presented by patients with COVID-19, treated with homeopathy by IHGG from March to April 2020 and in the same months of 2021, from the first day of evaluation (D0) to the 21st day (D21), State of São Paulo, 2021.

so because it is not known how it will evolve. In paragraph 72 of the same book, <sup>15</sup> Hahnemann describes the concept of acute disease and chronic disease, the former "[...] having the tendency to complete its course more or less quickly,

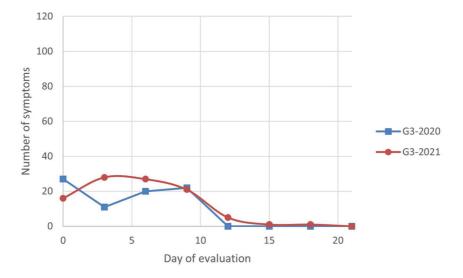
always in moderate time [...]", with two possibilities for resolution, cure or the death of the individual. On the other hand, chronic diseases "[...] often present an imperceptible starting point, spreading, affecting the organism in order to



G2-2020: Moderately frequent symptoms in the 2020 sample; G2-2021: Moderately frequent

symptoms in the 2021 sample.

Fig. 5 Behavior of the group of moderately frequent symptoms (G2) presented by patients with COVID-19, treated with homeopathy by IHGG from March to April 2020 and in the same months of 2021, from the first day of evaluation (D0) to the 21st day (D21), State of São Paulo, 2021.



G3-2020: Uncommon symptoms in the 2020 sample; G3-2021: Uncommon symptoms in the

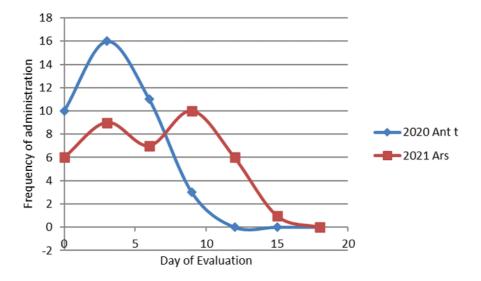
2021 sample.

Fig. 6 Behavior of the group of uncommon symptoms (G3) presented by patients with COVID-19, treated with homeopathy by IHGG from March to April 2020 and in the same months of 2021, from the first day of evaluation (D0) to the 21st day (D21), State of São Paulo, 2021.

slowly deviate from the normal state of health [...]", and it is not possible to predict the evolution time, until the organism is intensely compromised, unless there is a medicine stimulus to change this course. Thus, it is thought that in chronic diseases the process is more prolonged.

It is noted that the decrease in the frequency of symptoms that occurred in the 2021 sample was less accentuated as compared with the 2020 cases, which suggests-making a parallel with Hahnemann's reasoning regarding the concept of acute and chronic diseases-that the latent chronic disease developed and continued its course: that is, the remaining symptoms of the acute disease are merging with the chronic miasmatic disease that already existed in the individual before he or she developed COVID-19.

The evolution was different in the two observed years, with improvement of symptoms after 3 days of the first homeopathic prescription in 2020, whereas in 2021 this improvement occurred only after 6 days, giving indications that in 2021 there was a more chronic evolution of cases. The prescribed homeopathic medicines were also not the same in their entirety in the two periods analyzed, because the choice of prescription was guided by the peculiarity of the



**Fig. 7** Frequency of administration of the medicine related to the clinical resolution of the acute picture presented by patients with COVID-19, treated with homeopathy by IHGG from March to April 2020 (*Antimonium tartaricum*) and in the same months of 2021 (*Arsenicum album*), from the first day of evaluation (D0) to the 21st day (D21). State of São Paulo, 2021.

symptoms presented at the time of evaluation and not by the diagnosis presented by the individual. <sup>15</sup>

Despite a significant percentage of patients using various other medications, *Ant-t* was the most frequently prescribed medicine in 2020, whilst *Ars* was the most prescribed medicine in 2021.

#### **Conclusion**

Using the results obtained from retrospective observation of the clinical evolution of patients with COVID-19 treated on an outpatient basis with homeopathy in 2020 and 2021, and having used medicines selected by the similarity of symptoms to prioritize the particularities of each individual, it was observed that the evolution was different in the 2 years. In 2020, the symptomatology of the cases seemed to be more related to acute miasma, whereas in 2021 it seems that there was a greater interference of chronic miasma, which may explain the different frequency of medicines used in the two studied years.

## Highlights

- Homeopathic treatment for COVID-19 cases is a therapeutic option, considering the historical records of its efficiency in different epidemics.
- There was a difference in the evolution of the cases of COVID-19 treated with homeopathy in the two studied years, 2020 and 2021.
- Antimonium tartaricum was the most prescribed medicine in 2020.
- In 2021, Arsenicum album was the most frequently prescribed medicine.

## **Supplementary material**

**Supplementary File 1.** Free and informed consent form

Conflict of Interest None declared.

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