

China officinalis as Possible Homeopathic Prophylaxis for the Brazilian Dengue Epidemic

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Homeopathy

Abstract

Dengue, a hyperendemic arbovirus thriving in tropical and sub-tropical climates globally, has seen a significant surge in Brazil over the past 5 years. Presently, the country faces an epidemic, posing a huge challenge to Public Health authorities due to the potentially lethal nature of severe infections. Based on Hahnemannian concepts and on the historically reported efficacy of homeopathy in fighting epidemics, this study aimed to provide supporting evidence for a homeopathic genus epidemicus approach to prevent severe forms of dengue. Symptoms related to the severe phase of the disease were prioritised in the repertorisation: *China officinalis* (*Chin*) received the highest total symptoms score (43 points from 21 symptoms) followed by *Arsenicum album* (31/13) and *Phosphorus* (29/14). In the asymptomatic population exposed to the etiological agent, the use of *Chin* might contribute as an additional strategy in the prophylaxis of dengue.

Keywords

- ▶ dengue
- ▶ homeopathy
- ▶ prophylaxis
- ▶ epidemic
- ▶ *China officinalis*

Introduction

Since the 18th century, homeopathy has shown satisfactory results in epidemic situations. Hahnemann cites its use in scarlet fever, miliary purpura, typhus, and cholera epidemics.^{1–5} His disciples, throughout history and in different countries, based on his well-founded reasoning, continued to use homeopathy as prophylaxis and treatment of cholera, diphtheria, Spanish flu, scarlet fever, yellow fever, bubonic plague, smallpox, typhus, meningitis, dengue epidemics^{6,7}—and more recently in the COVID-19 pandemic.⁸

In paragraph 73 of Hahnemann's *Organon of the Art of Healing*, 6th edition,⁹ when referring to epidemic diseases—“(…) many persons are attacked with very similar sufferings from the same cause”—points out that due to the fact that the cases have “identical origins” they deter-

mine “an identical morbid process” for all of them. Thus, in epidemics, due to the uniformity of the predominant clinical picture (signs and symptoms), to the common etiological agent and to the high susceptibility of the population, a range of medications that present in their pathogenesis the most similar symptoms to those developed by the majority of patients must be defined based on the observation and study of several clinical cases of the disease.

The concept of genus epidemicus represents a specific approach to dealing with acute epidemic conditions. It refers to the homeopathic medicine that best resembles the totality of the characteristic and peculiar symptoms observed in the majority of individuals during a given epidemic. According to Hahnemann, despite there being a range of medicines with symptomatic similarity to the

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epidemic situation, the selected medicine to prevent serious and potentially lethal forms of the disease in question must be the one that presents the highest degree of pathogenesis similar to the most serious symptoms, as he describes in his article “Cause and prevention of Asian cholera” on the cholera epidemic he faced in Germany in 1831. He also demonstrates this guideline when he points out that the chosen medicine, in the case of a typical febrile disease of an epidemic nature, “must correspond by similarity” to the “strongest, best marked, and most peculiar” symptomatic picture of that particular disease (Organon §235).^{4,9,10}

Hahnemann makes it clear that the genus epidemicus should be used as a prophylactic medicine for individuals who do not show symptoms of the epidemic disease, but who still have the possibility of coming into contact with the etiological agent. This conduct is intended to reduce the chances of developing more serious conditions in these individuals, minimising health problems in this population.^{4,9,10}

Other medications found during the case study with symptomatic similarity to the epidemic situation may be options for the treatment of symptomatic individuals, being selected according to the particularity of each individual case.^{4,9,10}

In Brazil, in the fight against dengue epidemics in the interior of the state of São Paulo—in the cities of Penápolis and Pereira Barreto—in 2007 and 2010, and in the city of Iporá in the state of Goiás, in 2010, the choice of *China officinalis* (*Chin*) as a prophylactic medicine for the most serious forms of the disease (genus epidemicus) was made based on Hahnemann’s guidelines. In these prevention campaigns, two groups for analysing the results were defined: those who had taken the homeopathic medicine (intervention) and those who had not taken it (control). The entire population was monitored for a period of 3 months after the preventive actions. In 2007, the result was a 66% reduction in the incidence of dengue compared with the control group, showing the positive effect of this medicine in Penápolis. In 2010, using the same medicine, the effectiveness was 54% in Penápolis, 71% in Pereira Barreto, and 93.5% in Iporá. In addition to the positive effect, there was a lower morbidity in the medicated groups.^{7,8}

Dengue is a hyperendemic arbovirus in tropical and sub-tropical climates around the world, mainly in urban and suburban areas, with an increasing incidence in recent years.¹¹ According to a Pan American Health Organization (PAHO) epidemiological report, dated 29 March 2024, the increase in dengue cases in the region of the Americas is notable. In Brazil, “the number of cases reported in the first 12 epidemiological weeks of 2024 was 2,966,339, representing an increase of 227% compared to the same period in 2023 and an increase of 284% compared to the average of the last 5 years in this country. The cumulative incidence rate as of epidemiological week 12 is 1,386 cases per 100,000 population.”¹² By epidemiological

week 14 there were approximately 1,460 cases per 100,000 population, considering all Brazilian states, according to information from the Public Health Emergency Operations Center (COE) of the Secretariat of Health Surveillance, Ministry of Health. According to the COE, by 9 April 2024, 11 of Brazil’s 26 federative states had declared a state of emergency regarding dengue.

Thus, given the current situation in the country—which is challenging for Brazilian Public Health due to the potentially fatal results from severe infection—and considering the positive results shown in previous dengue epidemics, this study aimed to provide supporting evidence, with reasoning based on Hahnemannian concepts, for the use of *China officinalis* as a prophylactic homeopathic genus epidemicus medicine against severe disease in Brazil’s ongoing dengue epidemic.

Dengue

The initial dengue virus infection (DENV) diagnosis is clinical. There are currently four virus serotypes circulating in Brazil, with a serotype 1 (DENV-1) predominance. Any of the serotypes is capable of triggering anything from asymptomatic infections or mild conditions, such as a classic viral febrile syndrome, to more severe conditions with potentially fatal hemorrhages and shock. Infection with each serotype confers lifelong immunity to the specific serotype but not to the others. It is noted that more serious cases generally occur after the second infection, as re-infection with a different serotype makes the disease more severe.^{11,13,14}

From a clinical point of view, five distinct presentations of dengue are recognised: non-specific febrile illness, classic dengue, dengue hemorrhagic fever (DHF), dengue shock syndrome, and other severe syndromes (less common), with multi-system involvement. The typical clinical course of dengue includes three phases: febrile, critical and convalescent. Whilst classic dengue fever avoids the critical phase, proceeding directly to recovery, DHF, characterised by plasma leakage, occurs shortly after the febrile stage, becoming then the critical phase.¹¹

During the febrile phase, symptoms are similar to those of common viral infections, including high fever, headache, prostration, muscle weakness, joint and muscle pain, retro-orbital pain, maculopapular rash and other skin symptoms, anorexia, nausea, vomiting and diarrhea. Recovery occurs gradually after the febrile phase but may progress to hemorrhagic manifestations and other symptoms.^{11,15}

A percentage of individuals progress to the critical phase of the disease, with vascular leakage and increased risk of bleeding and liver dysfunction. This phase is characterised by a decline in fever and the emergence of warning signs, which include among others: intense abdominal pain; persistent vomiting; accumulation of fluids in body cavities (ascites, pleural effusion, and pericardial effusion); postural hypotension or lipothymia, with

dizziness, paleness, cold sweats, darkening of vision, tinnitus, and nausea; mucosal bleeding; lethargy and/or irritability; and hepatomegaly—any of which can progress to more serious symptoms.¹⁵

The classification of an individual with suspected dengue, in parallel to the presented clinical picture, considers four groups, from A to D, which reflect the severity of the disease. Group A corresponds to individuals without warning signs and without co-morbidities. Individuals in Group B also do not have warning signs, but present nausea, vomiting, rash, headache or retro-orbital pain, joint or muscle pain, gum bleeding, petechiae or induced bleeding (by the tourniquet test). Group C includes those with any of the warning signs, and Group D includes cases with signs of shock, severe bleeding, or severe organ dysfunction.¹⁵

Method for Choosing the Genus Epidemicus

To select the genus epidemicus for dengue, the symptom repertorisation technique was used, which consists of searching, among the medicines described in the homeopathic materia medicas, for the one that best fits the set of symptoms characteristic of the epidemic in question. All the symptoms selected for repertorisation and correlation with the studied materia medicas are consistent with the 2024 Brazilian Ministry of Health manuals.¹⁵ The J. T. Kent Repertory¹⁶ was chosen for this study.

Considering the objective of preventing the severe forms of dengue, priority was given to symptoms that point to warning signs and those related to the critical phase of the disease (clinical classification Groups C and D) in the repertorisation, giving importance to signs of shock, severe bleeding or organ dysfunction.

After repertorisation, a detailed analysis of the materia medicas of the homeopathic medicines with the highest scores was carried out. Publications by renowned authors were consulted for this purpose, including Hahnemann's *Materia Medica Pura*¹⁷; J. T. Kent's *Matéria Médica*¹⁸; Lathoud's *Studies of Homeopathic Materia Medica*¹⁹; and Vijnovsky's *Treatise on Homeopathic Materia Medica*.²⁰ Next, the symptoms found in the materia medicas were compared to the dengue symptoms described in the literature.

Results

► **Table 1** shows the selected repertory headings, considering the most serious symptoms of the epidemic disease in question, highlighting signs of severe organ dysfunction.

The table shows the medicines that appear in at least 10 of the 21 headings chosen for repertorisation. The total score and the number of symptoms covered by each medication are presented at the end of the table. Thus, after repertory analysis, the medicine *China officinalis* (*Chin*) received the highest score (43 points out of 21 symptoms) amid the evaluated medicines, with *Arsenicum album* (*Ars*) in second

place, with 31 points out of 13 symptoms, followed by *Phosphorus* (*Phos*) with 29 points out of 14 symptoms. Furthermore, *Chin* is the only medicine that appears in all the selected repertorisation headings.

After studying the materia medicas^{17–20} of these three medicines, *Chin* was chosen as the genus epidemicus for the current dengue epidemic, as it was recognised to be the medicine with the highest degree of similar totality of symptoms described in the most severe phase of the disease.

Discussion

As described, according to Hahnemann, when fighting an epidemic, in addition to treating symptomatic cases, it is necessary to develop strategies to prevent more serious stages, thus reducing harm to the health of the population in question. One strategy adopted is to provide to individuals who do not show epidemic disease symptoms, but who still have the possibility of coming into contact with the etiological agent, the medicine most similar to the most severe condition of the disease and, in this way, through the principle of similarity to act preventively.⁹

Although there are four dengue virus serotypes spread across Brazil, due to the similarity in the most serious conditions caused by each serotype, the genus epidemicus will be the same, regardless of the serotype responsible for the infection.

The study of the materia medica for *Chin* showed good coverage of this medicine for the described symptoms in the current dengue epidemic. Using the clinical classification presented with reference to the disease evolution, this correlation is observed in the four classification groups, noting a greater similarity to the symptoms that characterise Groups C and D.

The symptoms described in materia medicas of this medicine related to dengue warning signs, hemorrhagic manifestations, vascular leakage, and other indicators of severe disease are presented in ► **Table 2**.

It was observed that symptoms that appear in the dynamic development of the shock state, such as agitation, aggressiveness, cold, clammy, pale or cyanotic extremities, weak, filiform pulse, tachycardia followed by bradycardia, postural hypotension, tachypnea, deep and rapid breathing (Kussmaul breathing, characteristic of metabolic acidosis),¹⁵ can be found in the materia medica of *Chin*.^{17,19}

Likewise, the symptoms described in Groups A and B—symptoms of the milder phase of dengue—also correlate with those mentioned by some authors in the materia medicas for *Chin*, as shown in ► **Table 3**.

Given the above, using the process recommended by homeopathic theoretical principles, *Chin* appeared as the probable genus epidemicus of the current dengue epidemic in Brazil: that is, all the symptoms listed as being severe forms of dengue were confirmed in the materia medicas for *Chin*. It is therefore suggested that *Chin* be administered to a

Table 1 Repertorization of symptoms in the critical phase of dengue and symptomatic coverage by evidenced homeopathic medicines, using Kent's repertory¹⁶

Repertorial rubrics	Chin (43)	Ars (31)	Phos (29)	Nux-v (26)	Nat-m (24)	Lach (23)	Carb-v (20)	Sulph (20)	Puls (19)	Merc (17)
Abdomen, dropsy, ascites	2	3	2	1	-	-	-	2	1	2
Abdomen, enlarged, liver	3	2	2	3	2	1	2	2	-	2
Abdomen, enlarged, spleen	3	2	2	2	2	2	1	2	-	-
Abdomen, pain, chill, during	3	1	1	1	-	1	-	1	2	1
Chest, dropsy	1	3	-	-	2	2	2	2		2
Clinical, cyanosis	1	2	2	1	1	3	3	1	1	1
Clinical, hemorrhage, orifices of the body, from	2	-	3	-	-	2	-	-	-	-
Fever, burning heat, distended blood vessels, with	3	-	-	-	-	-	-	-	2	-
Fever, continued fever, petechial	2	3	2	-	-	2	2	1	-	-
Generalities, faintness, loss of fluids, from	3	-	-	-	-	-	-	-	-	-
Head, perspiration, forehead, cold, chill, during	1	-	-	-	-	-	-	-	-	-
Heart and circulation, pulse, irregular	3	3	3	1	3	3	2	3	1	3
Heart and circulation, pulse, weak	2	3	3	2	3	3	3		3	3
Stomach, vomiting, bile, fever, during the	2	2	1	2	2	-	-	1	2	1
Stomach, vomiting, chill	1	2	-	1	3	1	2	-	2	-
Urethra, hemorrhage, pure blood	2	-	-	2	-	-	-	-	-	-
Urethra, hemorrhage, pure blood, clotted	2	-	-	2	-	-	-	-	-	-
Urine, bloody	1	3	3	2	2	2	2	2	3	2
Vertigo, chill, during	2	-	1	3	1	-	-	1	1	-
Vertigo, loss of fluids	2	-	3	-	-	-	-	-	-	-
Head, pain, chill, during	2	2	1	3	3	1	1	2	1	-
Total score/total symptoms covered in the repertorization	43/21	31/13	29/14	26/14	24/11	23/11	20/10	20/12	19/11	17/9

Abbreviations: Chin, *China officinalis*; Ars, *Arsenicum album*; Phos, *Phosphorus*; Nux-v, *Nux vomica*; Nat-m, *Natrum muriaticum*; Lach, *Lachesis*; Carb-v, *Carbo vegetabilis*; Sulph, *Sulphur*; Puls, *Pulsatilla nigricans*; Merc, *Mercurius vivus*

population that does not have the disease, but that has the possibility of coming into contact with the etiological agent, serving as epidemic prophylaxis.

Other medications found during the study with symptomatic similarities to the epidemic can be used to treat symptomatic individuals, being selected according to the set of symptoms that each one presents. This particularity of each individual case is influenced by the constitution and vitality of each organism and also by the previous presence of a chronic miasmatic disease, resulting in the form of the manifestation of the epidemic disease, which may present more or less intense and severe symptoms

affecting one or more bodily system, which may result in an exacerbation of chronic conditions in some affected individuals (Organon §241).^{9,21} Therefore, in these cases, it is necessary to identify the individualised homeopathic medicine for these specific conditions, covering the totality of symptoms and regarding homeopathy's theoretical foundations.

Conclusion

This study indicates *China officinalis* as a possible genus epidemicus of the current dengue epidemic in Brazil. A

Table 2 Symptoms described in materia medicas of *China officinalis* related to dengue warning signs, hemorrhagic manifestations, vascular leakage, and other indicators of severe disease

Symptoms described in materia medicas of <i>China officinalis</i>
Pale, anemic, sickly face. Gradual intensification of anemia, with paleness and weakness ^{17,18,20}
Paleness that gradually worsens; cachexia; has liver, intestinal, and gastric problems and is very ill with almost everything (indigestion); frequent vomiting; anorexia; weight loss ^{17,18,20}
Weak, suffers from pain ¹⁸ ; internal compressive pains, as if caused by a weight, or tearing pains, external and in the bones. Internal and external stitches; abdominal pain; intolerable, cruel cramping pain; abdominal pain in the umbilical region combined with tremors; pain attacks in the hepatic region: when touched, the region is painful; swelling in the liver; spleen pain; hypertrophy and hardening of the liver and spleen; induration in the abdomen; hepatitis; encysted ascites ^{17,19,20}
Extreme sensitivity (pain worsens) to touch, movement, cold; gradual increase in nerve irritability ^{17,18,20}
Recommended for problems following loss of blood and other fluids ¹⁷⁻²⁰
Bleeds easily from any orifice in the body; epistaxis; bleeding in the ears; gum bleeding; hemoptysis; uterine bleeding; bloody bowel movements; vomiting of blood, sometimes followed by swelling of the extremities; hematuria ¹⁷⁻²⁰
Tendency to hemorrhage; hearing noise in the ears; fainting; general cold; darkening of vision; sometimes convulsions ²⁰
Hemorrhage of dark blood that clots easily, with profuse flow, leading to collapse ¹⁹
In anemic diseases, immediately following the loss of blood, dropsy appears. This is the typical Chin patient ¹⁸ ; hydrops (anasarca) ¹⁷
Congestion and inflammation associated with bleeding. Inflammation of the bleeding parts or elsewhere. Rapidly evolving and intense inflammation. The condition is accompanied by great irritability, excruciating pain, cramps, and convulsions ¹⁸
Cardiac and circulatory weakness and tendency to hydrops (anasarca: accumulation of fluid in closed cavities) with its occurrence after hemorrhage ¹⁸
Heart palpitation with anxiety, influx of blood to the head and cold extremities. Irregular, intermittent pulse; venous engorgement; dilated vessels, especially during fever; decreased blood pressure ¹⁷⁻²⁰ ; violent heartbeat with depressed pulse and coldness of the skin ¹⁷
Scanty urine with brick red sediment, with prominent swelling of the foot and red spots ¹⁷
Difficulty breathing, with rales. Pressure in the chest as from a violent rush of blood, strong palpitations, bloody discharge, sudden prostration ¹⁸ ; short, difficult and rapid breathing with tightness in the chest; blue nails ^{17,20}
Dyspnea; chest pains, behind the sternum, stabbing or pressing, which improves with deep breathing ^{17,19,20}
Feeling of chest oppression and restlessness; feels obliged to breathe deeply and then needs to exhale in a sighing manner, by which the oppression is lessened, with a weak pulse, hardly perceptible; impatient anxious spirit ¹⁷
Dull, tense, bruising pains, with stabbing pains in the back of the neck. <i>Chin</i> may be helpful in spinal irritation. ¹⁹ Person becomes weak, sleepless, irritable. Weakness, cold skin, cold sweating; limb spasms; muscle tightness and cramps; spasmodic contractions in various muscular parts; epileptiform convulsions; paralytic weakness; facial neuralgia; hears sound of bells, bangs, buzzing, crickets chirping in the ears; photophobia; icteric sclerae; night blindness; blurry vision; darkened vision ^{17,18,20}
Dazed from loss of fluids. ²⁰ Cachexia, with mental weakness, inability to think or remember. Gradually the mind weakens, using wrong phrases or misuses words. Apathetic, melancholic, without the energy to think, taciturn ^{18,20}
Dizziness, vertigo, and fainting at the slightest stimulus. Vertigo that persists ^{18,20}
Pale, anemic, sickly face. Gradual intensification of anemia, with paleness and weakness ^{17,18,20}
Paleness that gradually worsens; cachexia; has liver, intestinal, and gastric problems and is very ill with almost everything (indigestion); frequent vomiting; anorexia; weight loss ^{17,18,20}

high degree of similarity was verified between the symptoms described in the current literature for severe forms of dengue and the symptoms listed in several materia medicas for *China officinalis*. The entire selection and verification process of this selection was based on the Hahnemannian homeopathic model and could contribute as an additional strategy in the prophylaxis of severe forms of dengue. Other studies should be carried out to reinforce this possibility.

Highlights

- Based on the Hahnemannian homeopathic model, “the strongest and most peculiar symptoms” of acute dengue disease, allied to a scrutiny of the materia medica literature, were utilised in a search for the genus epidemicus.
- *China officinalis* exhibits a high level of similarity with the severe symptoms of dengue.

Table 3 Symptoms listed in the materia medica of *China officinalis* found in mild cases of dengue

Symptoms described in materia medicas of <i>China officinalis</i>
Fever, with weakness and cold skin; chills ^{18–20} ; violent chills with delirium; burning fever with stinging all over the body; continuous fever at night; dry or burning fever, with distended veins in the arms and hands, without thirst, worsened by movement; chills followed by fever and then sweats ²⁰ ; insidious fevers ¹⁷
Pain in limbs, muscles, joints during fever; sharp, tearing pains in the limbs during fever, worse with touch. ^{18,20} Weak knees, especially when walking; cutting, tearing pains throughout the body ¹⁸ ; very painful joints ¹⁹
Painful pulling along the bones of the lower extremities; pain in the limbs, especially in the joints; all joints feel stiff; everywhere has pain: in the joints, in the bones and in the periosteum, as if having been sprained, and like a pulling and tearing, especially in the spinal column, in the sacrum, in the knee ¹⁷
The medicine is fraught with headaches. ^{18,19} Congestive pains in weakened constitutions. Tearing, heaviness, pressure, pulsating pain. Stitching in the head with throbbing in the temples; stitches that go from one temple to the other; headache during fever; frontal headache; hemicranial headache; pain as if the head would burst; occipital compressive pain; headache so painful, as if the skull would burst into pieces, the brain beats in an undulating manner against the skull; the brain appears pressed by excess blood ^{17–20}
Eye pain; painful eye movements ^{19,20}
Aversion to all types of food. Loss of appetite. ^{18,19} General aggravation after eating; hard pressure in the stomach after every meal ¹⁷
Nausea, vomiting ^{18,19}
Diarrhea; several diarrheal spurts; light or yellowish in colour, bilious; black, liquid feces with a foul odour; melena; copious diarrhea at night; during the day, only after eating ^{17–20}
Sensitivity along the nerve paths. Tissue sensitivity ¹⁸
Redness in the cheeks and earlobes; swollen red face; general heat and weak fine ‘pins and needles’ on the skin of the entire body; temperature of the whole body somewhat elevated and dilated blood vessels, but without thirst; readily dilated pupils; itchy skin; after scratching blisters appear, as if from nettle stings ¹⁷

- *China officinalis* appeared as a possible genus epidemicus and homeopathic prophylactic medicine for the current dengue epidemic in Brazil.

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Conflict of Interest

None declared.

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