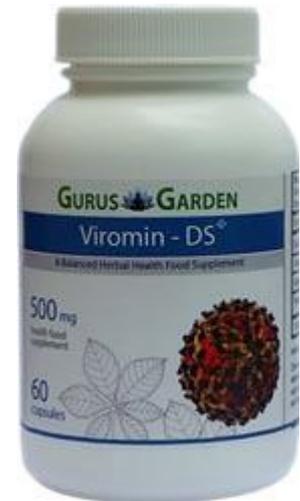


## VIROMIN-DS

### TRADITIONAL INDICATIONS

1. Viral Infection
2. Viral Pneumonia
3. Viral Fever
4. Dengue Fever
5. Chikungunya Virus Infection



### Dengue

Dengue infection is a systemic and dynamic disease. It has a wide clinical spectrum that includes both severe and non-severe clinical manifestations. After the incubation period, the illness begins abruptly and is followed by the three phases; 1. Febrile 2. Critical and 3. Recovery.

For a disease that is complex in its manifestations, management is relatively simple, inexpensive and very effective in saving lives so long as correct and timely interventions are instituted. The key is early recognition and understanding of the clinical problems during the different phases of the disease, leading to a rational approach to case management and a good clinical outcome.

Activities (triage and management decisions) at the primary and secondary care levels (where patients are first seen and evaluated) are critical in determining the clinical outcome of dengue. A well-managed front-line response not only reduces the number of unnecessary hospital admissions but also saves the lives of dengue patients. The Early notification of dengue cases seen in primary and secondary care is crucial for identifying outbreaks and initiating an early response

### Febrile phase

Patients typically develop high-grade fever suddenly. This acute febrile phase usually lasts 2-7 days and is often accompanied by facial flushing, skin erythema, generalized body ache, myalgia, arthralgia, and headache. Some patients may have a sore throat, injected pharynx, and conjunctival injection. Anorexia, nausea, and vomiting are common. It can be difficult to distinguish dengue clinically from non-dengue febrile diseases in the early febrile phase. A positive tourniquet test in this phase increases the probability of dengue. In addition, these clinical features are indistinguishable between severe and non-severe dengue cases. Therefore, monitoring for warning signs and other clinical parameters is crucial to recognizing progression to the critical phase.

Mild hemorrhagic manifestations like petechiae and mucosal membrane bleeding (e.g. nose and gums) may be seen. Massive vaginal bleeding (in women of childbearing age) and gastrointestinal bleeding may occur during this phase but is not common. The liver is often enlarged and tender after a few days of fever. The earliest abnormality in the full blood count is a progressive decrease in total white cell count, which should alert the physician to a high probability of dengue.

### **Critical phase**

Around the time of defervescence, when the temperature drops to 37.5-38 C or less and remains below this level, usually on days 3-7 of illness, an increase in capillary permeability in parallel with increasing hematocrit levels may occur. This marks the beginning of the critical phase. The period of clinically significant plasma leakage usually, lasts 24-48 hours.

Progressive leukopenia followed by a rapid decrease in platelet count usually precedes plasma leakage. At this point patients without an increase in capillary permeability will improve, while those with increased capillary permeability may become worse because of lost plasma volume. The degree of plasma leakage varies. Pleural effusion and ascites may be clinically detectable depending on the degree of plasma leakage and the volume of fluid therapy. Hence chest x-ray and abdominal ultrasound can be useful tools for diagnosis. The degree of increase in the baseline hematocrit often reflects the severity of plasma leakage.

Shock occurs when a critical volume of plasma is lost through leakage. It is often preceded by warning signs. The body temperature may be subnormal when the shock occurs. With prolonged shock, the consequent organ hypoperfusion results in progressive organ impairment, metabolic acidosis and disseminated intravascular coagulation. This, in turn, leads to severe hemorrhage causing the hematocrit to decrease in severe shock. Instead of the leukopenia usually seen during this phase of dengue, the total white cell count may increase in patients with severe bleeding. In addition, severe organ impairment such as severe hepatitis, encephalitis or myocarditis and/or severe bleeding may also develop without obvious plasma leakage or shock. Those who improve after defervescence are said to have non-severe dengue. Some patients progress to the critical phase of plasma leakage without defervescence and, in these patients, changes in the full blood count should be used to guide the onset of the critical phase and plasma leakage.

Those who deteriorate will manifest with warning signs. This is called dengue with warning signs (Text). Cases of dengue with warning signs will probably recover with early intravenous rehydration. Some cases will deteriorate to severe dengue.

### **Recovery phase**

If the patient survives the 24-48-hour critical phase, a gradual reabsorption of extravascular compartment fluid takes place in the following 48-72 hours. General well-being improves, appetite returns, gastrointestinal symptoms abate, hemodynamic status stabilizes and diuresis ensues. Some patients may have a rash of "isles of white in the sea of red". Some may experience generalized pruritus. Bradycardia and electrocardiographic changes are common during this stage.

The hematocrit stabilizes or may be lower due to the dilutional effect of reabsorbed fluid. White blood cell count usually starts to rise soon after defervescence but the recovery of platelet count is typically later than that of white blood cell count.

Respiratory distress from massive pleural effusion and ascites will occur at any time if excessive intravenous fluids have been administered. During the critical and/or recovery phases, excessive fluid therapy is associated with pulmonary edema or congestive heart failure.

The various clinical problems during the different phases of dengue can be summarized as in Table below.

1. **Febrile phase** Dehydration; high fever may cause neurological disturbances and febrile seizures in young children
2. **Critical phase** Shock from plasma leakage; severe hemorrhage; organ impairment
3. **Recovery phase** Hypervolemia (only if intravenous fluid therapy has been excessive and/or has extended into this period)

## Severe dengue

Severe dengue is defined by one or more of the following: (i) plasma leakage that may lead to shock (dengue shock) and/or fluid accumulation, with or without respiratory distress, and/or (ii) severe bleeding, and/or (iii) severe organ impairment.

As dengue vascular permeability progresses, hypovolemia worsens and results in shock. It usually takes place around defervescence, usually on day 4 or 5 (range days 3-7) of illness, preceded by the warning signs. During the initial stage of shock, the compensatory mechanism which maintains a normal systolic blood pressure also produces tachycardia and peripheral vasoconstriction with reduced skin perfusion, resulting in cold extremities and delayed capillary refill time. Uniquely, the diastolic pressure rises towards the systolic pressure and the pulse pressure narrows as the peripheral vascular resistance increases. Patients in dengue shock often remain conscious and lucid. The inexperienced physician may measure a normal systolic pressure and misjudge the critical state of the patient. Finally, there is decompensation and both pressures disappear abruptly. Prolonged hypotensive shock and hypoxia may lead to multi-organ failure and an extremely difficult clinical course.

## DOSAGE and DIRECTIONS



For Adults 18 yrs or above, one (1) Capsule twice daily (every 12 hours) in empty stomach with lukewarm water.

Please give minimum 30 min to take any food after taking VIROMIN-DS.

Take optimum water to enhance elimination of released toxins from the body.



## INGREDIENTS

### Supplement Facts

Serving Size: 1 Capsule (500 mg each)

Servings per container: 60

Each Serving contains		%DV
Euphorbia Hirta L	165 mg.	*
Andrographis Paniculata	165 mg.	*
Simarouba Glauca	165 mg.	*
Pepperine 95%	5 mg.	*

\* Daily value (DV) not established.

## HEALING CRISIS

There is no Healing crisis.