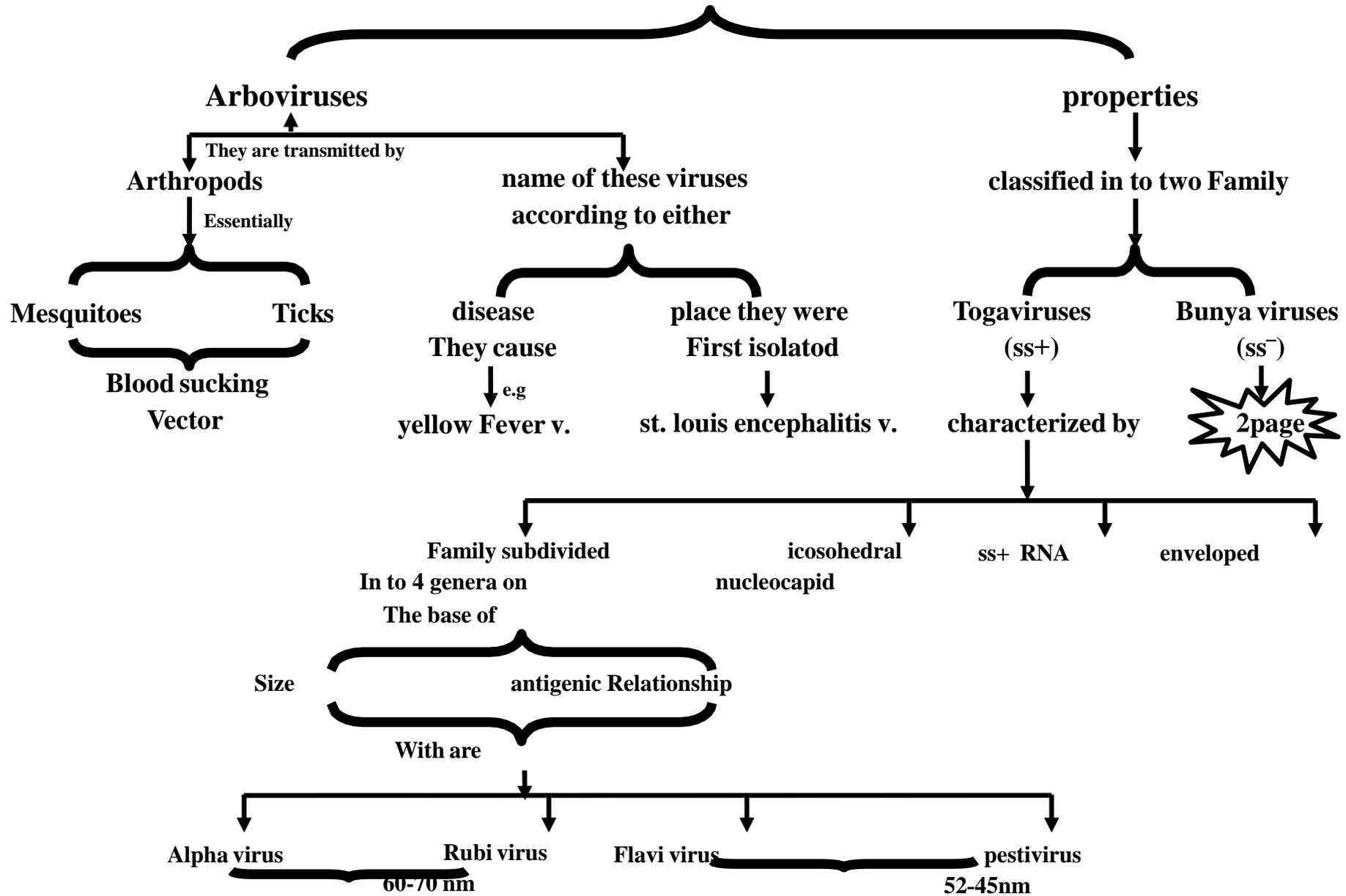
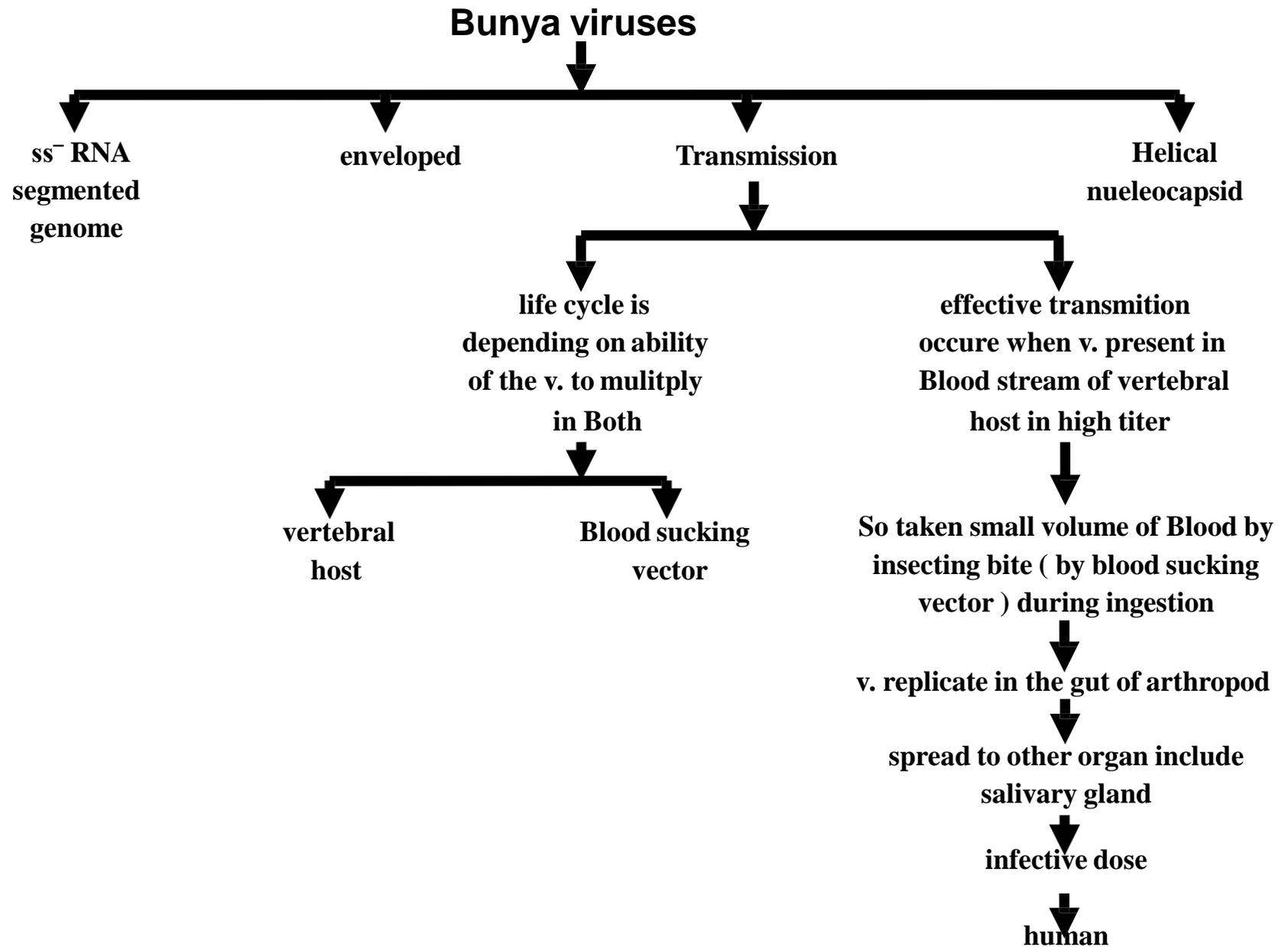
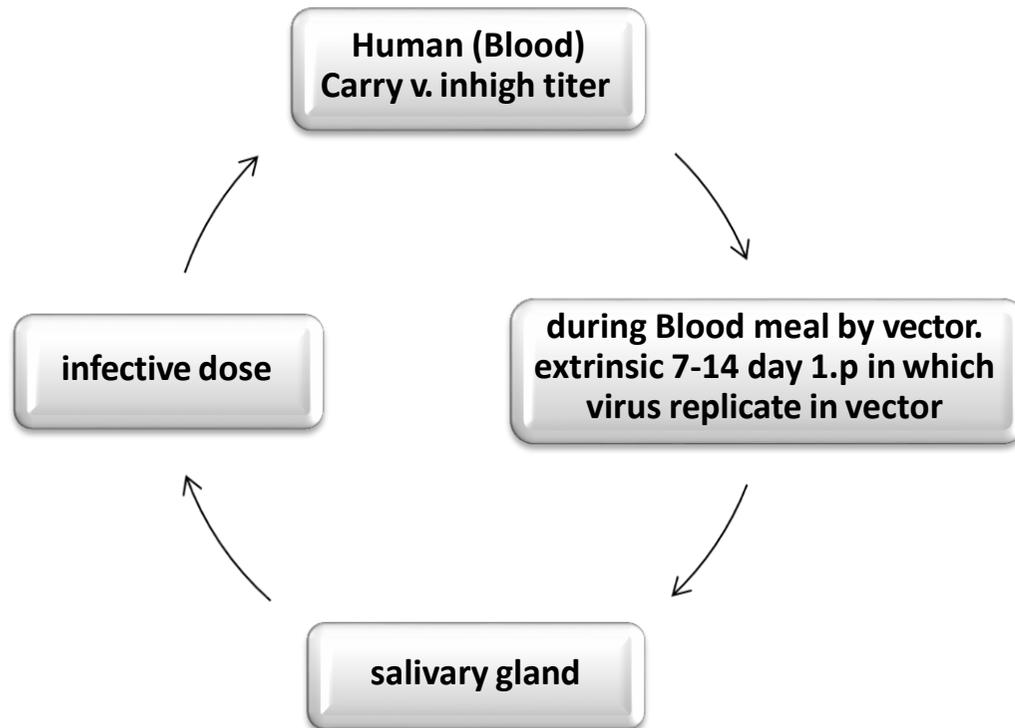


RNA enveloped viruses







Notice : only ♀ of arthropod serve as vector
because only ♀ require Blood meal For
producing progeny

Notice life cycle of

↓
Extrinsic incubation period
needed

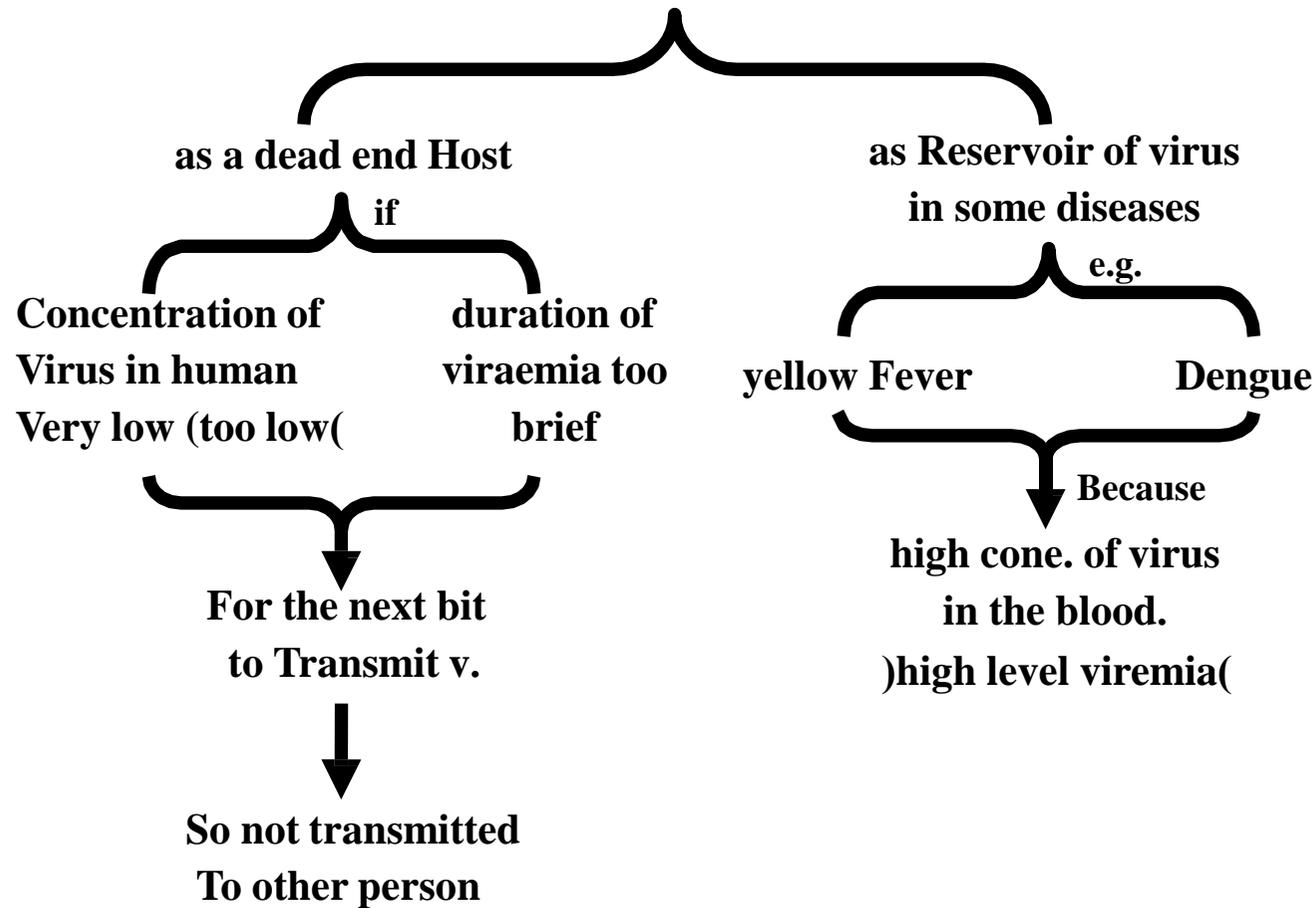
↓ Because
The virus replicated sufficiently
in order to saliva of vector
Contain enough v. to
transmitted to infectious dose.

Other notice

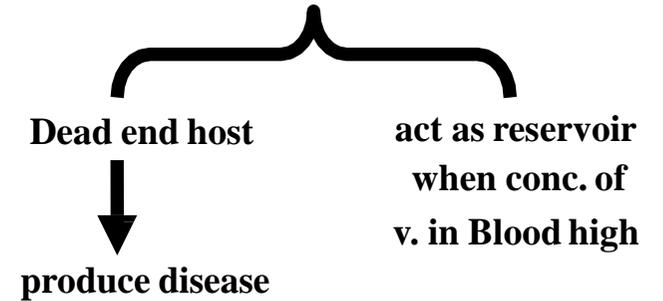
Some of arbor v. transmitted by
vertical passages (Transovarin)
From mother tick to her
offspring

↓
This very important to maintain
survival of the v. if the vertebral 3 page
host is unavailable

**Human are involve in transmission of arbo viruses
By two different way**



Human in yellow Fever may act as



Infection by arbo viruses



Usually Does not cause
disease either in



arthropod vector

in vertebral animal that
serve as natural host

Disease occur primarily when



virus infect Dead end host



e.g.

yellow Fever virus cycle is
harmless among jungle

monkey

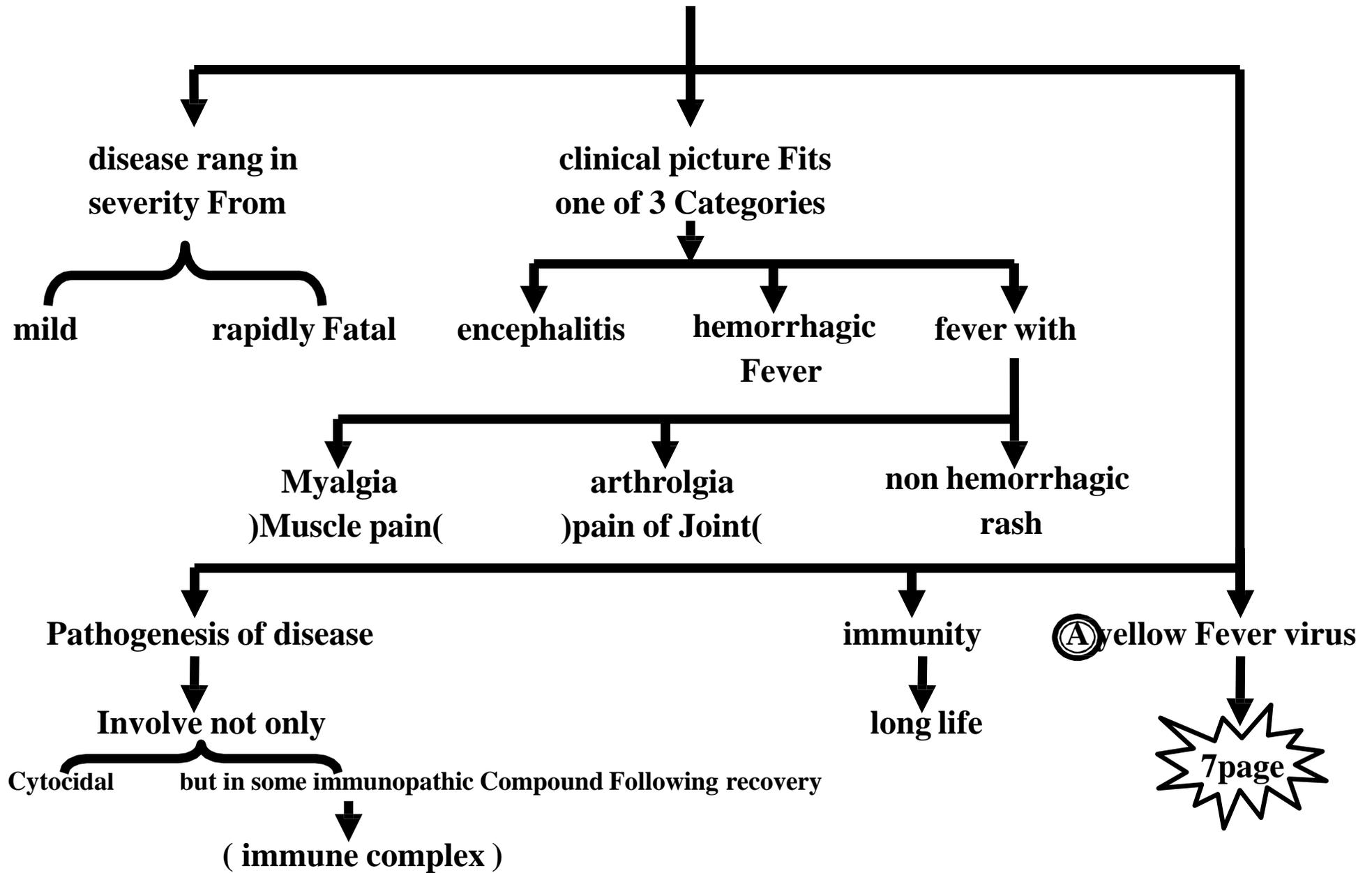


but when v. infect human

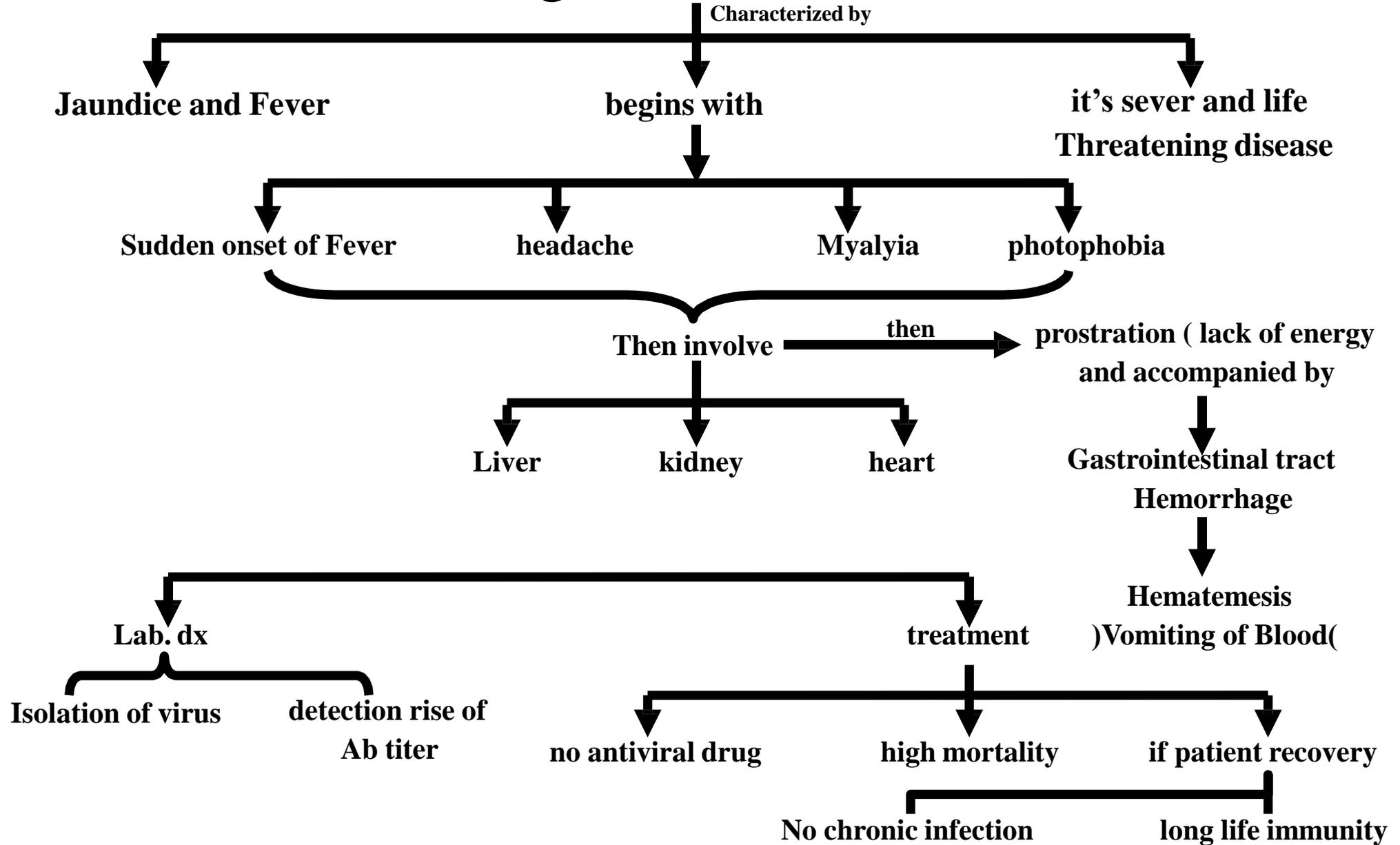


yellow Fever occur

clinical Finding and epidemiol. of arbo v.

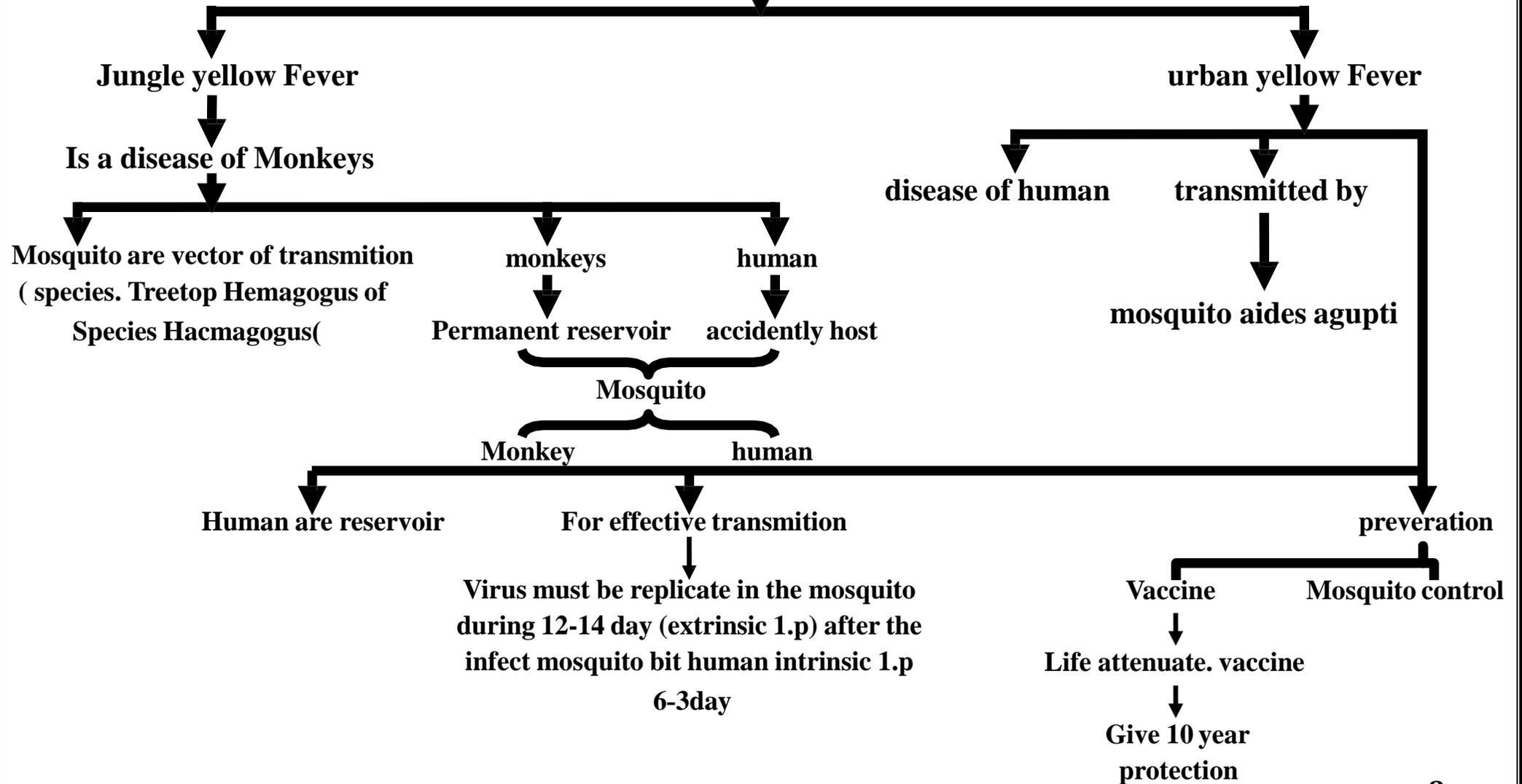


Ⓐ yellow Fever virus



Epidemiology

There are two life cycle of yellow fever exist in Nature with different Reservoir + vectors



ⓑ Dengue virus

Disease classified under 2 categories

Classical Dengue

Dengue Hemorrhagic fever

Break born fever Begin suddenly With flue like syndrome include

sever pain in Muscle and Joint (Break born)L.N enlargement

maculo popular rash

Fever malaise cough headache

Leucopenia after 2weeks

symptom disappear but weakness persist

its rarely Fatal and has Few squealer

Is much more sever Disease with % 10 Fatal rate

initial picture in similar to classical Dengue

then Shock and hemorrhage especially in

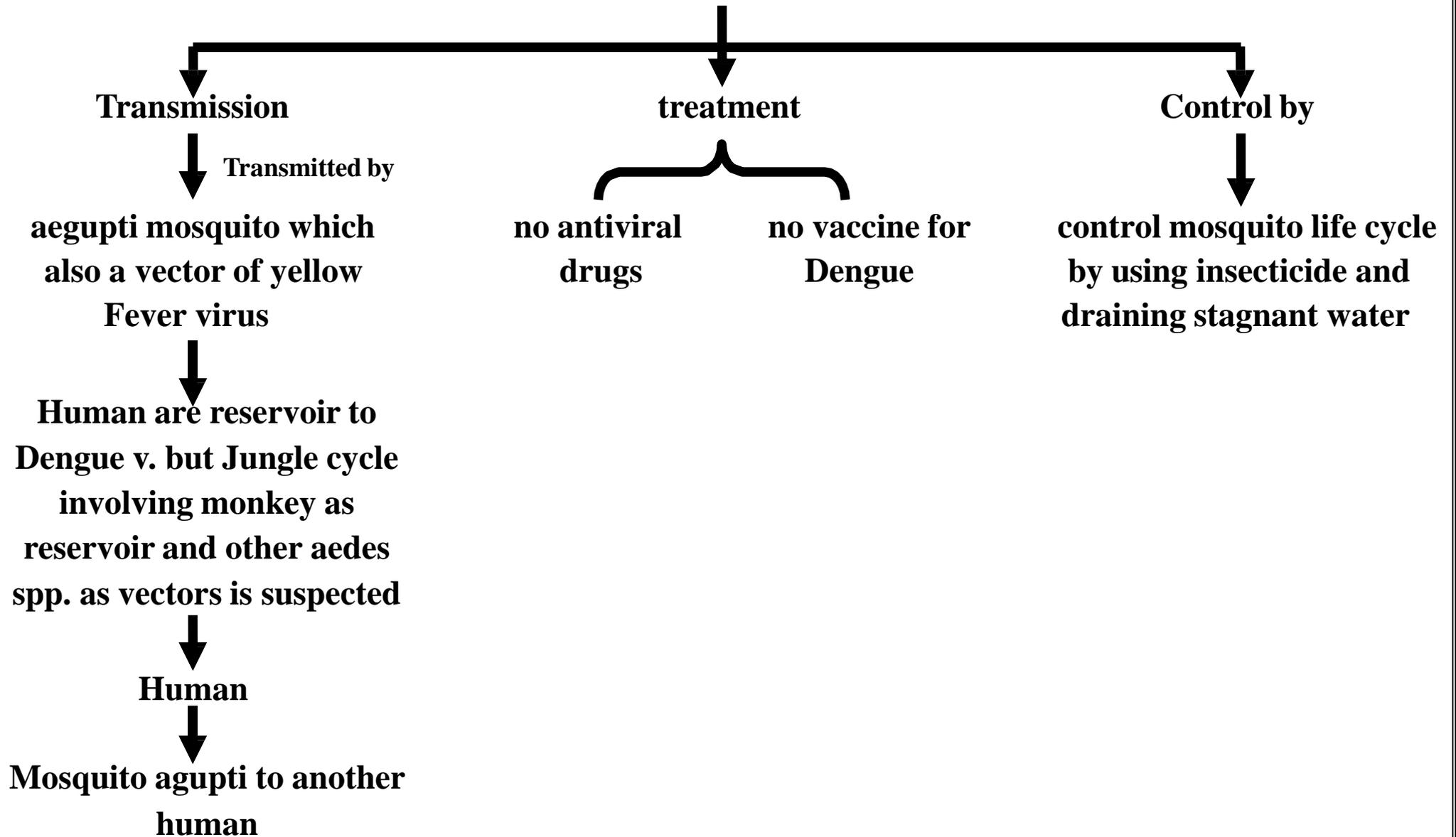
GIT

Skin

Hemorrhagic shock syndrome is due to Production large amount of cross reacting Ab at the same time of second dengue infection

Disseminated intravascular clott

Dengue Hemorrhagic Fever



Pathogenesis of Dengue virus

