Euphorbia hirta - A possible game changer in Dengue management

Dengue continues to be an increasing cause of morbidity and mortality in Asia, Africa, the Caribbean and American regions, and Portugal. About 5% of patients develop severe dengue, which manifests as severe plasma leakage, hemorrhage or organ impairment including hepatitis, myocarditis and encephalitis. The cornerstone of treatment is maintenance of adequate circulatory volume during the stage of increased vascular permeability or hemorrhage by administering fluids, plasma expanders and blood transfusion. Use of folkloric plants such Euphorbia hirta, or in the vernacular “tawa-tawa” or “gatas-gatas” is popularly used against dengue in the Philippines. Journals showing the efficacy of E. hirta against dengue will be reviewed. These include its effects in platelet augmentation, reduction of bleeding time and blood clotting time in animals with chemically induced thrombocytopenia, platelet increases in dengue patients belonging to the 30-55 age group and marked reduction of flu like symptoms in 70% of patients, which was attributed to its anti-inflammatory properties. Phytochemicals such as phenolic compounds and flavonoids in E. hirta are known to have platelet increasing potential. Also, the ethanol extract of E. hirta under in vitro conditions showed an 85% inhibition of plaque forming capacity of dengue with serotype 1 (DENV-1) and 34.7% inhibition of virus serotype 2. E. hirta has a platelet augmentative effect and antiviral activity, which are vital in the prevention of complications. Despite the existing evidence published, more studies are needed to validate its efficacy, establish the dose needed and toxicity.

Biography

Maria Lourdes Gomez Gozali has completed her Medical degree at the University of Santo Tomas, Philippines. She finished her pediatric residency and fellowship in infectious diseases in Makati Medical Center in the Philippines. She served as a former chairman of the Department of Pediatrics of Asian Hospital and Medical Center and was also chief of the section of the Pediatric Infectious Diseases in Makati Medical Center and Asian Hospital and Medical Center. She is an active consultant in both hospitals, as well as in St. Luke’s Medical Center Global City.

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