

Extracts of Plants Used by Traditional African Healers Have the Ability to Block Virus Entry into Cells

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Background & Aim :

Our goal was to determine if the plant extracts and herbal medicines are used by African healers in the treatment of HIV-1 had any biological activity to explain their effectiveness at reducing viral loads which was documented in earlier clinical studies conducted by PROMETRA International.

Materials & Methods :

Plant mixtures were finely ground. The resulting powder was suspended in sterile distilled water and shaken at 200 RPM for 2 h at room temperature. The dried material was resuspended in distilled water and filter sterilized prior to use in the Multifocal Assay using a Galactosidase Indicator (MAGI) infectivity assays.

Results :

Results show that microgram quantities of the dried material from plant extracts were able to inhibit infection of MAGI cells by HIV-1NL4-3 in a dose and time dependent manner. Mitochondrial toxicity test (MTT) showed little or no cellular toxicity even at milligram levels of extract. Preliminary studies of the mechanism of inhibition suggest that the plant extracts have the ability to block viral entry.

Conclusion :

Extracts of plants have the ability to block HIV-1 entry into cells in tissue culture. Preliminary testing suggests that the extracts react with gp120 and block its ability to interact with CD4 receptor.

Keywords:

HIV, Traditional Medicine, Africa, laboratory, Tests

The Influence of Electroacupuncture on Physiological Change under Intravenous Glucose Tolerance Test

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Background & Aim :

The electroacupuncture (EA) on bilateral zusanli acupoints can decrease the blood glucose levels, which the endorphin and serotonin participate in this mechanism. The EA is able to enhance insulin sensitivity via the improvement of glucose tolerance and increase exogenous insulin function. About the physiological change, it is necessary to study and understand further about the effect of the electroacupuncture (EA)

Materials & Methods :

we would like to investigate EA stimulation on STZ and normal Wistar rat to explore the physiological changes of electrocardiogram (EKG) and body temperature (BT). The male normal Wistar and STZ induced diabetic rats were used in this study. Under anesthesia by pentobarbital (40 mg/Kg, i.p.), the rats will divided into experimental group treating 15 Hz EA on bilateral zusanli acupoint for 60 min, and control group no treating EA during the same time. We will compare the effect of EKG and body temperature (EG and CG) by time in 90-min observation.

Results :

The STZ and normal Wistar rats' physiological indicators (heart rate, body temperature, R-R interval, and QRS wave) had significant differences during the ivGTT. The STZ rats' BT was lower than the normal wistar rats', and with longer R-R interval, narrower QRS-wave and slower heart beats.

Conclusion :

Keywords:

electroacupuncture, temperature, electrocardiogram, zusanli, intravenous glucose tolerance test.