

A randomized single blind comparative trial to evaluate the efficacy of whole plant of *Phyllanthus niruri* Linn. crude powder with *Pushyanuga Churna* in the management of *Rakta Pradara* due to Dysfunctional Uterine Bleeding (DUB)

Perera HARP¹, Karunagoda K², Perera PK³, Samarasingha K⁴, Arawwawala LDAM⁴

¹ Department of Kaumarabhrithya and Striroga, Gampaha Wickramarachchi Ayurveda Institute, University of Kelaniya, Yakkala, Sri Lanka

² Department of Kaumarabhrithya, Prasuthi Tantra and Stree Roga, Institute of indigenous Medicine, University of Colombo, Rajagiriya, Sri Lanka

³ Department of Drvyaguna Vignana, Institute of Indigenous Medicine, University of Colombo, Rajagiriya, Sri Lanka

⁴ Industrial Technology Institute, Bauddhaloka Mawatha, Colombo 7, Sri Lanka

Abstract

According to Ayurveda, *Raktapradara* has been explained under *Artava Vyapad*. It resembles with menorrhagia explained in allopathic medicine. Dysfunctional Uterine Bleeding (DUB) is an abnormal uterine bleeding without any obvious structural or systemic pathology. *Bumyamalaki* (*Phyllanthus niruri*. Linn) has been recommended in the management of *Raktapradara* with rice washed water. *Pushyanuga Churna* was selected as positive control drug for DUB. Female patients in the age between 12-50 years who were diagnosed with *Raktapradara* due to DUB were included in the study. A total of 60 patients were randomly divided into group A and group B with 30 patients in each. The study aimed at evaluating the comparative effect on the amount of blood loss, duration, intermenstrual period and pain relieving property and ability to relief its associated symptoms such as *Angamarda* and *Arati*. The observed values of Hb%, BT, CT platelet count, urine and endometrial thickness before treatment was within normal ranges. Data were collected and recorded before the trial and three follow ups monthly with treatment within the trial and after one month without treatment were done. At the last follow up all investigations were again repeated to analyze if any changes were seen after the therapy. The t-test was applied to the mean of observed values before and after treatment. *P. niruri*. made to evaluate phyto and physico-chemical properties and anti-oxidant activity of *P. niruri* grown in Sri Lanka. The improvement parameters were significant statistically ($p < 0.05$). According to the results, $7.7 \pm 0.2\%$ of total ash, $3.4 \pm 0.1\%$ of water soluble ash and $0.9 \pm 0.0\%$ of acid insoluble ash were present in the whole plant of *P. niruri*. Phytochemical screening reveals the presence of tannins, flavonoids, steroid glycosides, coumarins, saponins and cardiac glycosides in both hot water and hot methanolic extracts of *P. niruri*. TLC fingerprint profile of the methanolic extract of *P. niruri* consists of 8 and 9 prominent spots at 254 nm and 366 nm respectively. These results can be used as a reference standard for quality control of *P. niruri* grown in Sri Lanka. The anti-oxidant activity of *P. niruri* powder has $P < 0.05$ which can be regarded as significant.

Keywords: Herbal preparation, precancerous lesion.

Corresponding Email: renupri76@yahoo.com