

## Intervention of *Pasakuru Pattuwa* on Reunion of Fractures: A Clinical Study

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Sri Lanka has a well-established traditional orthopedic treatment system, which is popular among laypersons as an effective treatment modality. Sirimalwatta Parampara is an eminent native practitioner who has practiced for many generations. *Pasakuru pattuwa* is one such paste that has been used by this generation for fracture reunion, which includes the barks of *Terminalia arjuna* (Roxb. ex-DC.), Wight and Arn, *Ficus recemosa* L., *Opuntia ficus-indica*, *Ficus religiosa* L., *Bignonia chelonoides* L. f. and ghee. This clinical study was conducted to evaluate the efficacy of *Pasakuru pattuwa* (paste) in reunion of fractures using four subjective parameters of pain, tenderness, edema, and range of movements as well as X-ray imaging. For this study sixteen patients were purposely selected within the age group of 18-75 years who were having bone fractures (radius, calcaneus, clavicle, humerus shaft, tibial and medial malleolus fractures). The patients were diagnosed at the first stage of the fracture, regardless of sex, occupation, religion, or fracture site from the Kadumbidum clinic at Rural Ayurveda Hospital, Siripura, Sri Lanka. Ethical clearance was obtained from the Ethics Review Committee, Faculty of Indigenous Medicine, University of Colombo (ERC 23/214). The patients were assessed using a standard proforma before treatment and every other week for one month. Data were analyzed using the SPSS and the results revealed that pain, edema, and range of movements were significantly reduced with *p* values of 0.001, 0.014, and 0.055 respectively. However, *Pasakuru pattuwa* did not show a significant effect on tenderness. X-ray images clearly demonstrated callus formation after treatment compared to before treatment. Hence, it can be concluded that *Pasakuru pattuwa* is effective in managing the fracture reunion process by reducing signs and symptoms with notified callus formation. Further clinical studies with this paste are recommended to determine the effectiveness of *Pasakuru pattuwa*.

**Keywords:** *Pasakuru Pattuwa, Callus Formation, Fracture, Traditional Medicine, Reunion*