

## ABSTRACT

The purpose of this paper is to contribute to the diagnosis of leprosy and to evaluate the possibility of a misdiagnosis based on SBRN palpation and its anatomical relationships. A clinical study was conducted based on the results obtained by three leprologists. Each examiner performed SBRN palpation at the radius dorsal tubercle level on a total of 70 upper extremities of 25 hansen's disease patients and 10 healthy controls. All test subjects were adult males. The data collected regarding the SBRN thickness, consistency and shape were statistically analyzed to evaluate agreement using Kappa statistics and association through chi-square test. Macro and microscopic observations of the anatomical relationships of the thickest branch of the SBRN with surrounding tendons and veins, at the radius dorsal tubercle level, were also performed. A total of 20 formalin (10%) preserved adult male human cadavers upper extremities were studied macroscopically and 22 upper extremities of 10% formalin preserved adult male human cadavers, microscopically. Results indicated that palpation of SBRN is subject to considerable inter-observer variation. Chi-square results show a statistically significant association between SBRN thickness and clinical group, as well as of SBRN thickness and consistency. Anatomical aspects of SRBN demonstrated some findings that can lead to erroneous clinical assessment of its thickness, consistency and surface. Difficulties in evaluating the SBRN by palpation and the anatomical variations

observed suggest caution when interpreting results, and that inclusion of this nerve during routine field work neurological evaluations be considered with reservations.