Introduction: Electrocution is a frequent cause of traumatic death. It produces lesions and external signs that should be corroborated by microscopic findings. Objective: To correlate macroscopic findings with histopathologic results in electrocution deaths. Design: Descriptive, cross-sectional, correlational, retrospective study. Setting: Legal Medicine Institute-MP, Pathology Institute, Universidad Nacional Mayor de San Marcos, Lima, Peru. Material: Medicolegal necropsy reports. Results: From 116 cases, 8 were women and 108 males, mean age was 31.3 years. Twenty three per cent were electricians and 18% worked in construction. The incident occurred at labor center in 51%. Suicide accounted for two cases. Frequent macroscopic findings were general signs of choking, power input injuries, myocardial hemorrhage and subpleural petechiae in 73.3%. Microscopic alterations were skin coagulative necrosis in 87 cases, cerebral edema in 101, pulmonary hemorrhage in 83, acute myocardial infarction in 87, and acute tubular necrosis in 72 cases. A significant association between macroscopic and microscopic findings (0.592 V Cramer value; p <0.0001) was found. Conclusions: Most common macroscopic findings (lesion input, myocardial hemorrhage and subpleural petechiae) and most frequent microscopic findings (skin coagulative necrosis, acute myocardial infarction and acute tubular necrosis) related to electrocution seemed to be significantly associated.

Keywords
Electrocution, macroscopic findings, histopathology.