Abstract: The changes in hyaluronic acid(HA) contents and skin vascular permeability of scalded rats were measured by FITC marked albumin and radioimmunoassay to study the influence of -100V, -250V, -500V, -750V and -1000V electret on the changes of HA contents and vascular permeability. The results showed that (1) 12h after scalding, the skin vascular permeability and serum HA contents increased markedly but a great decline of HA contents in skin tissue, and these changes can reflect the pathologic changes in inflammatory course. (2) 12h after treating with electret the skin vascular permeability and HA contents in serum decreased markedly and the reverse in skin tissue. The results suggested that electret is beneficial to retarding the decomposition of HA in tissue matrix produced by scalding and also is beneficial to the decrease of skin vascular permeability.