SUMMARY

The Thoroughbred horse is one of the most common breed being reared for race purpose. However, due to the foot and leg injuries, a large number of horses are culled and hence horse raising industry faces severe economic losses. The leg conformation defects are the common cause of leg injuries in horses. About 46% of the total leg injuries originate from the leg tendon or ligament injuries. The injury reoccurrence rate is approximately 80% during the total racing life. Leg injuries due to body conformation defects might be the reason of short racing life in horses. Additionally the breeding ability may reduce because of leg conformation defects and this problem may inherit to next generation. There is a significant association between age and the risk of injury. Highest rate of musculoskeletal injuries observed during first two years and the lowest at four years of age. In young horses the irreversible leg injuries may lead to early end of their racing life.

Therefore, in this back ground this is necessary to obtain leg morphometric data objectively from healthy horses *in situ* position. In order to determine the relationship between age and the development of leg conformation, the data was obtained from Thoroughbred horses at different ages: six, twelve, eighteen, twenty-four, thirty-six and forty-eight months of age. The photographs of each left leg were taken simultaneously from each horse *in situ* position from three sides (front, left and back side). All the measurements taken from photographs were analyzed to get the reference values of leg conformation.

A high correlation was found between croup and withers length ($r=0.83$, 0.93, 0.90, 0.96, 0.47 and 0.75 respectively; $P<0.05$) in all age groups. Furthermore, croup length was higher ($P<0.05$) then withers in all age groups. The mean values of pastern and hoof angles were different than the reported in literature.

Keywords: Thoroughbred horse, conformation, leg structure.