

Abstract

Title: Analysis of the Tennis Serve from the perspective of the receiving player

Objectives: To determine whether it is possible for the receiving opponent to estimate the direction and type of tennis serve based on the server's toss.

Methods: The indirect method was used in the form of video surveillance to meet the objectives. The analyzed group consisted of five professional tennis players, who were exposed to the research model game situation. All five servers were recorded by a high speed camera in the area of the receiving player; radar was used to measure the ball speed. The key point for evaluation was the moment of release of the ball from the server's hand, the highest reached point of the ball and the moment when the ball was hit by the racket. The analyzed results were presented in the form of tables and graphs; from the statistical methods, the arithmetic average was used mainly.

Results: This research focused on anticipating the tennis serve from the perspective of the receiving player. Overall, we observed five players, who served first from the right side and then the left side into the dedicated opponent's receiving area marked by lines. We established a research question whether it is possible to estimate the direction and type of serve based on the server's toss. When comparing the average of the five players, only one of the four hypotheses was confirmed. We can say that it is possible to estimate the direction and type of serve but only under certain conditions. To be able to find the characteristics for anticipating the serve direction, it is certainly necessary to have seen the player serve that least several times. When tossing the ball during the serve, it is not possible to anticipate the direction and type of serve using only a certain formula without previous visual contact.

Keywords: tennis, tennis skill, anticipating the serve, observations