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Abstract

We sought to study the physical demands and match performance of women soccer players. Nineteen top-class and 15 high-level players were individually videotaped in competitive matches, and time-motion analysis were performed. The players changed locomotor activity >1,300 times in a game corresponding to every ~4 seconds and covered 9-11 km in total. The top-class players ran 28% longer (P < 0.05) at high intensities than high-level players (1.68 +/- 0.09 and 1.33 +/- 0.10 km, respectively) and sprinted 24% longer (P < 0.05). The top-class group had a decrease (P < 0.05) of 25-57% in high intensity running in the final 15 minutes compared with the first four 15-minutes intervals, whereas the high-level group performed less (P < 0.05) high-intensity running in the last 15 minutes of each half in comparison with the 2 previous 15-minute periods in the respective half. Peak distance covered by high intensity running in a 5-minute interval was 33% longer (P < 0.05) for the top-class players than the high-level players. In the following 5 minutes immediately after the peak interval top-class players covered 17% less (P < 0.05) high-intensity running than the game average. Defenders performed fewer (P < 0.05) intervals of high-intensity running than midfielders and attackers, as well as fewer (P < 0.05) sprints than the attackers. In conclusion, for women soccer players (1) top-class international players perform more intervals of high-intensity running than elite players at a lower level, (2) fatigue develops temporarily during and towards the end of a game, and (3) defenders have lower work rates than midfielders and attackers. The difference in high-intensity running between the 2 levels demonstrates the importance of intense intermittent exercise for match performance in women soccer. Thus, these aspects should be trained intensively in women soccer.