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Comparison of Muscle Damage in Turkish Collegian Soccer Players after Playing Matches on Artificial and Natural Turf Fields

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ABSTRACT The researchers have attempted to compare muscle damage in soccer players after matches played on artificial and natural turf fields. The study was performed on 16 male soccer players. A match was played on an artificial turf field, and another one was played on a natural turf field. Visual analogue scale scores, myoglobin, creatine kinase, aspartate transaminase and lactate dehydrogenase levels were measured before the match, after the match and at the 72nd hour. The 2x3 repeated measure ANOVA test was performed for statistical analysis. Comparing the artificial turf and natural turf field values, the post-match and 72nd hour visual analogue scale scores for artificial turf field were found to be statistically significant and higher than the natural turf field values. Based on these findings, the researchers claim that muscle damage is not significantly different when comparing matches played on both fields.