**Supplemental Digital Content 12. Association between fatigue fracture and muscle injury in each sex and sports discipline/events**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | n (%) | Fatigue fracture vs. No fatigue fracture |
| Muscle injury | No muscle injury | OR [95% CI] | *P*-value |
| Male athletes | Fatigue fracture | 14 (11.0) | 113 (89.0) | 0.50 [0.26-0.90] | **0.019**a |
|  | No fatigue fracture | 120 (17.8) | 553 (82.2) |
| Female athletes | Fatigue fracture | 12 (14.8) | 69 (85.2) | 0.74 [0.34-1.53] | 0.433a |
|  | No fatigue fracture | 44 (14.5) | 260 (85.5) |
| Female athletes with irregular menstruation | Fatigue fracture | 5 (15.2) | 28 (84.9) | 0.63 [0.16-2.24] | 0.485a |
|  | No fatigue fracture | 12 (18.8) | 52 (81.2) |
| Track & field athletes | Fatigue fracture | 11 (15.3) | 61 (84.7) | 0.28 [0.13-0.57] | **<0.001**b |
|  | No fatigue fracture | 80 (35.9) | 143 (64.1) |
| Power athletes | Fatigue fracture | 7 (24.1) | 22 (75.9) | 0.37 [0.13-0.93] | **0.034**b |
| (sprinters, jumpers, and throwers) | No fatigue fracture | 69 (44.0) | 88 (56.0) |
| Endurance athletes | Fatigue fracture | 4 (9.3) | 39 (90.7) | 0.34 [0.08-1.18] | 0.092b |
| (middle-long distance runners) | No fatigue fracture | 11 (17.2) | 53 (82.8) |
| Soccer players | Fatigue fracture | 9 (10.0) | 81 (90.0) | 0.87 [0.38-3.61] | 0.704b |
|  | No fatigue fracture | 54 (11.6) | 412 (88.4) |

CI, confidence interval; OR, odds ratio. Bold emphasis: *P* < 0.05. a *P*-value by the logistic regression analysis after adjustment for main sport (track & field or other), playing years, and competitive level. b *P*-value by the logistic regression analysis after adjustment for sex, playing years, and competitive level.