

عنوان مقاله:

Effect of Twelve-Week hypoxic interval training on lung volumes and records of elite swimmers in 50 and 100 meters breaststroke

محل انتشار:

فصلنامه پزشکی هرمزگان، دوره 20، شماره 1 (سال: 1395)

تعداد صفحات اصل مقاله: 5

نویسندگان:

Abbas Ali Gaeini
Hamed Faragardi
Sadegh Satarifard

خلاصه مقاله:

Introduction: Holding the breath during exercise causes hypoxia. This study set out to investigate the effect of the 12-week hypoxic interval training on lung volume and records of elite swimmers in 50 and 100 meters breaststroke. **Methods:** In this quasi-experimental study, 22 male swimmers were randomly divided into the hypoxic interval training group (n: 13; age: 16.61±1.39 years; height: 177.92±1.94 cm; weight 70.17±3.55kg) and normal training group (n: 9; age: 16.67±1.16 years; height: 176.33±5.24cm; weight 67.83±4.24kg). The hypoxic interval training program included 3-8 sets of 25-200 m breaststroke and the butterfly (breathing every 4-6 strokes), six-time per week for 12 weeks. The normal training routine performed without breath-holding (breathing every 2 strokes). The FIVC, FEV₁, FVC, and FIV₁ parameters, as well as records in 50m and 100m swimming were measured pre- and post-training. The obtained data was analyzed with ANCOVA ($P<0.05$). **Results:** Swimmers' records in both 50 m and 100 m swimming scenarios significantly decreased after the application of the hypoxic interval training program. The FIVC, FEV₁, FVC, and FIV₁ parameters significantly increased only after the hypoxic training ($P<0.05$); in addition, the post-training values of these variables were significantly higher in the experimental group than the control group ($P<0.05$). However, no significant change was observed in the values of these variables in the normal training group (control). **Conclusion:** It seems that the 12-week hypoxic interval training program can increase the lung volume and improve the records of the elite swimmers in 50m and 100m breaststroke.

کلمات کلیدی:

Hypoxic, Lung Volume, Swimming Record, Hypoxic, Lung Volume, Swimming Record

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1912486>

