

Abstract 183 Table 1

	% Asymmetry HT	% Asymmetry ST	% Asymmetry CT	5m(sec)
After warm up	10.2±10.1	5.2±3.1	5.1±5.5	1.31±0.05
After series 1	11.3±9.6	17.1±17.6**	13.1±5.5**	1.52±0.11*
After series 2	14.1±7.7	20.2±16.7**	15.1±9.8**	1.59±0.07*
After series 3	14.7±7.6	19.9±15.1**	20.2±5.6***	1.72±0.13*

*p<0.05 **p<0.01 p<0.001 (from after-warm-up value)

Conclusions The jumps with frontal plane displacement and those on the two planes (the CT is performed by jumping simultaneously on the sagittal and frontal plane) have the highest asymmetry values and seem influenced by post-SSG fatigue. Sprint values undergo acute decreases in performance too.

184 MANAGING VITAMIN D SUPPLEMENTATION IN ELITE ACADEMY FOOTBALLERS

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Background The maintenance of phosphate and calcium homeostasis alongside optimal vitamin D status is essential for bone health. Moreover, low vitamin D is associated with an increased risk of stress fracture, impaired muscular remodelling and increased risk of upper respiratory tract infections.

Objective The primary objective was to assess the efficacy of an individualised in-season vitamin D supplementation programme. The secondary aim was to observe for regression of vitamin D levels during the longer daylight months (April-October) in players where vitamin D was not routinely supplemented.

Design Serum 25 Hydroxyvitamin D (Serum 25[OH]D) levels were collected twice a year (October and April). Levels were categorised as: deficient (<30 nmol/l), insufficient (31–75), sufficient (76–175) or overloaded (>175). Players with sufficient levels were given a maintenance protocol (20,000iu once weekly) October-April. Players who were deficient/insufficient were given a loading regimen (20,000iu twice weekly for three weeks) and the maintenance protocol thereafter.

Setting A category one Premier League Elite Player Performance Plan (EPPP) youth football academy.

Participants 13 participants from the u23s and u18s squads.

Interventions Serum 25[OH]D levels were collected (via venous blood sample) twice a year (October and April). Levels were categorised as: deficient <30nmol/l, insufficient 31–75nmol/l, sufficient 76–175nmol/l or overloaded >175nmol/l.

Players with sufficient or insufficient levels were given a maintenance protocol (20,000IU once weekly) during October-April. Players who were deficient were given a loading regimen (20,000iu twice weekly for three weeks) and the maintenance protocol for the remainder of winter (22 weeks). Oral supplementation was administered using Synergy Biologics LTD Pro D3 Sport 20k (UK).

Results There was no significant increase in serum 25[OH]D during the supplementation period (October-April). However, 20,000iu of supplemental Vitamin D over a 25-week period was sufficient to maintain vitamin D status. Baseline

serum 25[OH]D was not significantly increased after a period of supplemental vitamin D during winter months. Further studies in this population group would be beneficial to assess the effects of longer term season-on-season supplementation.

185 REVIEW OF THE PHYSIOTHERAPY SERVICE FOR ATHLETES IN 2018 OLYMPIC WINTER GAMES

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Objective This study will provide to better understand the needs for physiotherapy services during the 2018 PyeongChang Olympic Winter Games (POG) from two polyclinics. It is necessary to understand the needs and what physiotherapists do during the Olympic Winter games for first time.

Design An observational study.

Setting 2018 PyeongChang Olympic Winter Games.

Participants Athletes who visited the physiotherapy department of polyclinics.

Results During 25 the days of the POG, a total of 125 athletes (n = 125, 83 males, 42 females) visited the two polyclinics. Of all visits, 69.6% were from the mountain polyclinic and 30.4% from the city. There were three reasons for visit, most of the reason for visit was injury and injury with recovery or injury prevention. Overall, the injury rate (per 1000 athletes) was 42.8 across 13 sports visited the physiotherapy department during the POG. Total numbers of treatments sessions were 823 provided and electrophysical modalities (36.2%) was the most utilized service in POG. And also there were significant differences in the physiotherapy services provided at the two polyclinics.

Conclusion As each polyclinic differed in location, they addressed different populations of athletes; hence, the study provides insights into the injury trends and different physiotherapy treatments.

186 EPIDEMIOLOGY OF INJURY AND RETIREMENT FROM SPORT AMONG FORMER INTERNATIONAL ATHLETES

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Background High-level athletes are at an increased injury risk. Yet relatively little is known about the prevalence of career-ending injuries in high-level sport.