Asthma in Finnish competitive cross-country skiers

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Background

Cross-country skiing causes strain in the airways and athletes train and compete in cold and dry conditions during the winter. The aim of this postal questionnaire was to investigate the prevalence of asthma, use of asthma medication and asthma control in Finnish cross-country skiers competing at national level.

Results

26 % **Prevalence of physician**diagnosed asthma no difference between sexes (men 25 %, women 27 %)

Use of asthma medication

	asthma	no asthma	р
Regular use of inhaled corticosteroids	75 (82 %)	6 (2 %)	<0.001
Use of short-acting bronchodilators pre-emptively before exercise	55 (60 %)	19 (7 %)	<0.001
Use of short-acting bronchodilators for asthma-related symptoms after onset of symptoms	32 (35 %)	11 (4 %)	<0.001
Seasonal use of inhaled corticosteroids	6 (7 %)	6 (2 %)	0.057

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[1] Honkamäki et al. Respir Med 2019 [2] Norqvist et al. J Asthma 2019 [3] Eklund et al. 2018 Scand J Med Sci Sports

Methods

56 %

Prevalence of asthma among the best quartile of skiers based on FIS-points (international ranking system)

Asthma Control Test (ACT) score ≥ 20 points \rightarrow The majority of asthmatic skiers have well-controlled asthma

Conclusions



89 %

12–18 years

Peak incidence of asthma onset age in skiers \rightarrow During the same time the volume and intensity of training increases

Asthma is more prevalent and diagnosed later in life in crosscountry skiers compared to previous reports from general population in Finland [1]

The prevalence of asthma is similar compared to other studies conducted in skiers in 2010s [2,3]

Skiers with asthma use mostly inhaled corticosteroids, as recommended, and short-acting relievers are used more often before exercise than after having asthma-related symptoms

Asthma is mainly well controlled among skiers and the most prevalent among the most successful skiers, suggesting that well-controlled asthma does not prevent success



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