

## • 研究报告 •

## 耳部防护措施与外耳道骨疣发病的关系

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**[摘要]** 目的:探讨冬泳时耳部防护措施与外耳道骨疣发病及其严重程度的相关性。方法:对315名冬泳爱好者进行调查,填写调查表,包括个人基本信息、耳部防护措施、冬泳时间、耳部疾病病史等,将调查表及检查结果(电耳镜)结合起来得出基本数据。根据外耳道的狭窄程度对外耳道骨疣进行分级:<33%为重度狭窄,33%~65%为中度狭窄,66%~99%为轻度狭窄,100%为正常。根据冬泳时有无耳部防护措施将冬泳爱好者分为防护组和无防护组。结果:本组外耳道骨疣的总发病率为17.6%。在110只骨疣耳中,63.6%为轻度,23.6%为中度,12.7%为重度。冬泳时耳部无防护组,33.0%患外耳道骨疣,4.6%重度耳道狭窄;有耳部防护组,2.8%患外耳道骨疣,无重度耳道狭窄。结论:冬泳时耳部防护措施与外耳道骨疣的发病及严重程度呈负相关,即冬泳时采取耳部防护措施可以预防外耳道骨疣的发病并降低其严重程度。

**[关键词]** 外耳道骨疣;发病;狭窄**doi:**10.13201/j.issn.1001-1781.2014.19.011**[中图分类号]** R764.71 **[文献标志码]** A

## The relationship between the ear protective measures and the prevalence of external auditory canal exostoses

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**Abstract Objective:** To determine the relationship between the ear protective measures during winter swimming and the prevalence, severity of the incidence of external auditory canal exostoses. **Method:** Three hundred and fifteen people who enjoyed swimming were recruited as research subject (62.2% males and 37.8% females; age distribution: 4.4% were ≤40, 40.3% were 41 to 60, and 55.2% were >60 years). People fill in the questionnaires including personal information, the ear protection measures, the time of winter swimming, the history of ear infections and so on, and questionnaires were correlated with otoscopic findings. We classify external auditory canal exostoses according to the degree of the stenosis of external auditory canal s. Grades of normal, mild, moderate and severe corresponded to 100%, 99% to 66%, 65% to 33%, and less than 33% respectively. **Result:** Of 110 ears with exostoses, 63.6% were mild, 23.6% were moderate, and 12.7% were severe. Among the group of without ear protection during winter swimming, about 33.0% have auditory canal exostoses and 4.6% were severely affected. In comparison, in the group that had ear protection, only 2.8% had external auditory canal exostoses and no one had severely obstructed auditory canal. **Conclusion:** A negative association exists between the ear protection measures during winter swimming and the prevalence and severity of exostoses of the external auditory canal. That means taking ear protective measures when having winter swimming can prevent the onset of the external auditory canal exostoses and reduce its severity.

**Key words** external auditory canal exostoses; prevalence; stenosis<sup>1</sup> 山东单县中心医院耳鼻咽喉科(山东单县,274300)

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外耳道骨疣为骨性外耳道良性病变,在普通人群中发病率较低,但在特殊人群(水上运动者)中发病率较高<sup>[1-2]</sup>。临床认为外耳道骨疣的发病与冷水刺激致外耳道骨质增生有关<sup>[3]</sup>。本研究目的是通过对315名冬泳爱好者的调查及626只耳的电耳镜检查结果来评估冬泳人群中外耳道骨疣患病的风险;分析冬泳时耳部防护措施与外耳道骨疣发病及严重程度的关系。

## 1 资料与方法

2013-11—2014-01对青岛市冬泳协会315名冬泳爱好者进行调查,其中男196例,女119例; $\leq 40$ 岁14人(4.4%),41~60岁127人(40.3%), $> 60$ 岁174人(55.2%)。冬泳爱好者根据自身情况填写调查表(主要项目包括个人基本信息、冬泳时耳部防护措施、冬泳时间、耳部疾病、既往全身疾病等),填表完成后由耳鼻喉医师进行耳部检查(电耳镜)并详细记录检查结果。本文参考Brian等<sup>[4]</sup>研究中外耳道狭窄的分级标准,根据骨疣横截面上剩余外耳道有效空间的百分比对外耳道狭窄进行分级: $< 33\%$ 为重度狭窄;65%~33%为中度狭窄;99%~66%为轻度狭窄;100%为正常。将所得数据进行统计学分析,得出冬泳时耳部防护措施与外耳道骨疣发病及其严重程度的关系。

## 2 结果

根据冬泳时有无耳部防护措施将315名冬泳爱好者分为防护组160人(320耳)和无防护组153人(306耳),2人未回答有无耳部防护措施。72人(22.9%)有耳部感染治疗的病史,3人(0.9%)有外耳道骨疣手术史。所检查的313人(626耳)中,外耳道骨疣重度者14耳(2.2%),中度者26耳(4.2%),轻度者70耳(11.2%),正常者516耳(82.4%)。本研究共有110耳(17.6%)患外耳道骨疣,轻度占63.6%,中度占23.6%,重度占12.7%。

冬泳时耳部防护措施与外耳道狭窄程度的关系见表1。经统计学分析,2组外耳道骨疣的发病及严重程度差异有统计学意义( $P < 0.01$ )。

表1 冬泳时耳部防护措施与外耳道狭窄程度的关系

组别	耳数	外耳道狭窄 耳(%)			
		无	轻度	中度	重度
无防护组	306	205(67.0)	62(20.3)	25(8.2)	14(4.6)
有防护组	320	311(97.2)	8(2.5)	1(0.3)	0(0)

## 3 讨论

外耳道骨疣较为常见,起源于鼓环,通常为双侧、对称多发性骨质隆起,可累及全颞骨<sup>[3]</sup>,与经常

冷水刺激有关<sup>[4-6]</sup>。Standen等<sup>[7]</sup>通过研究发现沿海地区外耳道骨疣的发病率为30.7%,内陆地区外耳道骨疣的发病率近乎为零。本研究冬泳人群中外耳道骨疣的总发病率为17.6%。可见冬泳爱好者人群中外耳道骨疣的发病率明显高于无频繁进行水上运动的人群。本研究外耳道骨疣的发病及严重程度与冬泳时耳部防护措施呈负相关。每组均可见正常耳与外耳道骨疣患耳,但冬泳时有耳部防护组较无耳部防护组外耳道骨疣的发病显著减少,未发现重度外耳道骨疣患耳,且差异显著。通过本研究结果可以确定冬泳时采取耳部防护措施可以预防外耳道骨疣的发病并降低其严重程度的可能性。

临幊上对于较小的外耳道骨疣病变,尚无耳鸣、听力下降、耳痛、耳道堵塞感等症状的患者,可暂时观察定期复诊。当病变引起上述症状时,应考虑手术治疗。为了减轻外耳道骨疣给患者带来的痛苦,对此病易发人群进行健康宣传和疾病的预防是值得特别关注的。对于冬泳者、冲浪者、海员、深水潜水者等,建议他们应尽可能少暴露于冷水中。进行水上运动时采取戴耳塞、泳帽等耳部防护措施以减少冷水进入外耳道的机会,从而预防外耳道骨疣的发生并降低其严重程度。

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