External Auditory Exostoses - Surfers Ear

What is the prevalence and severity of external auditory exostoses for surfers who surf in cold water temperatures compared with surfers surfing in warm water temperatures and is the severity and prevalence of exostoses also affected by increasing time spent in the water?

Introduction

Surfing in cold water is thought to be a major contributor to the condition external auditory exostoses (Brown, 2012). External auditory exostoses is also known as "surfers ear." Surfers ear causes the ear canal to narrow, as water causes an overgrowth of bone in the ear. Water does not drain out of the ear properly and can cause hearing problems. Once the damage is done it cannot be reversed without surgery (Brown, 2014).

Discussion of practice issue of clinical setting

External auditory exostoses is a health issue that is prevalent in countries that have cold water (Brown, 2012). The condition is relevant in New Zealand as surfing is a common sport. Otago has a surfing culture where individuals surf all year round (Frisby, 2004). The condition is becoming a problem as Otago surfers are spending large amounts of time in waters with a mean sea surface temperature of 11.1 C (World Sea Temperature, 2014).

Results

The literature shows that there is a higher prevalence and severity of this condition in surfers that are exposed to cold water temperatures. compared to warmer water temperatures. The severity and prevalence of external auditory exostoses increases with the frequency and time spent in the water. For each year the risk of developing the condition increased by 12% (Kroons et al., 2002). Another study showed that the severity increased with the amount of years and number of sessions per year (Deleyiannis, Cockcroft & Pinczower, 1996).

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Recommendations

- -Educating surfers about: Dangers of surfing in cold water for a period of time can contribute to the condition.
- -Making surfers aware that this condition is often asymptomatic until the ear canal is narrowed by 80%. At this point it cannot be reversed without surgery (Brown, 2012).
- -Many experts encourage preventative methods the use of earplugs and wet suit hoods to limit cold water entering in the ear (Brown, 2014).
- -The use of posters about external auditory exostoses should made available in surf shops, surfing schools and at surfing competitions to increase the awareness among surfers, as this is targeting surfing industries.
- -Encourage local surf shops, surfing schools and surfing competitions to make ear plugs and other water precautions available to consumers.

Conclusion

- -External auditory exostoses is a condition which develops in relative to cold water exposure.
- -It is a common condition in surfers yet preventable.
- -Surfers need to be made aware of the condition and understand the implications of not using water precaution methods.

References

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Search question identified

To define the research question the pecot model was used (Koshar, 2014). The research question has been defined as; what is the prevalence and severity of exostoses for surfers who surf in cold water temperatures compared with surfers surfing in warm water temperatures, and is the severity/prevalence of exostoses also affected by increasing time spent in the water?

Pecot category	Information relating to question	Explanation
Population	The population for this review will be surfers	Surfers are one of the most common group of individuals to experience exostoses
Exposure	Surfers surfing in cold water, temperatures that are at risk of the condition exostoses.	This review will be looking at articles that used an experiment to determine populations of surfers that had exostoses.
Comparison/ Control	Surfers surfing in warm water temperatures.	It will be interesting to see if there is still an impact on surfers ears in warmer water temperatures compared to colder temperatures.
Outcome	The outcome will be the amount of surfers that develop the condition and the severity which will be the grade of the exostoses.	By looking at the rate of occurrence of exostoses in surfers, we will be able to see common it is in this population. Also, looking at the severity of the condition will give an indication as to the grade of narrowing of the ear canal.
Time	An increasing time period	It has hard to set a specific time period for the condition as it can take years of exposure to develop.

Reference

Koshar, J. (2014). Nursing research and evidence based practice. Retrieved from http://www.sonoma.edu/users/k/koshar/n300/PICOs.html



