

환경역학		번호: II - B - 1			
제 목	국문	기온저하와 허혈성뇌졸중 발생의 관련성			
	영문	Ischemic stroke onset associated with decrease in temperature			
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<p>1. 연구 목적</p> <p>Some studies suggest that low temperatures can affect mortality, especially deaths associated with circulatory and respiratory condition. The authors investigated the association between ischemic stroke onset and decrease in temperatures in 545 patients over a 3-year period (January 1998 to December 2000) in Incheon, Korea.</p> <p>2. 연구 방법</p> <p>We chose to use a case-crossover study design to assess the changes in the risk of ischemic stroke during a brief hazard period after exposure to decrease in temperature. For each subject, 1 case period was matched to 2 control periods exactly 1 week apart before and after the date and time of the onset of the ischemic stroke.</p> <p>3. 연구 결과</p> <p>Decreased ambient temperature was found to be associated with the risk of acute ischemic stroke. One day after being exposed to cold weather, we found the strongest effect for the onset of an ischemic stroke. The odds ratio for an interquartile range decrease in temperature was 2.85 (95% CI 1.53, 5.30). The elevated risk period was 24 to 54 hours</p>					

after cold exposure. Risk estimates associated with decreased temperature were found to depend on the season, and to be greater in the winter than in the summer. We also found that women, persons greater than 65 years of age, non-obese persons, and those with previous hypertension or hypercholesterolemia are more susceptible to cold-induced ischemic stroke.

4. 고찰

We suggest that stroke occurrence rises with decreasing temperature, and that even a moderate decrease in temperature can lead to a higher occurrence of ischemic stroke. This study indicates that the susceptible people should be more careful to protect themselves from developing cold-induced ischemic stroke, especially in the winter.