References

- 1. Powell KE, Thompson PD, Caspersen CJ, Kendrick JS. Physical activity and the incidence of coronary heart disease. Annu Rev Public Health 1987; 8:253-87.
- Berlin JA, Colditz GA. A meta-analysis of physical activity in the prevention of coronary heart disease. Am J Epidemiol 1990; 132:612-28.
- Paffenbarger RS Jr, Laughlin ME, Gima AS, Black RA. Work activity of longshoremen as related to death from coronary heart disease and stroke. N Engl J Med 1970; 282:1109-14.
- Paffenbarger RS Jr, Hyde RT, Wing AL, Hsieh CC. Physical activity, all-cause mortality, and longevity of college alumni. N Engl J Med 1986; 314:605-13.
- Shapiro S, Weinblatt E, Frank CW, Sager RV. Incidence of coronary heart disease in a population insured for medical care HIP: myocardial infarction, angina pectoris, and possible myocardial infarction. Am J Public Health 1969; 59(6)(Suppl):1-101.
- 6. Morris JN, Everitt MG, Pollard R, Chave SP, Semmence AM. Vigorous exercise in leisure-time: protection against coronary heart disease. Lancet 1980; 2:1207-10.
- Lindsted KD, Tonstad S, Kuzma JW. Self-report of physical activity and patterns of mortality in Seventh-Day Adventist men. J Clin Epidemiol 1991; 44:355-64.
- Kaplan GA, Seeman TE, Cohen RD, Knudsen LP, Guralnik J. Mortality among the elderly in the Alameda County Study: behavioral and demographic risk factors. Am J Public Health March 1987; 77:307-12.
- Leon AS, Connett J. Physical activity and 10.5-year mortality in the Multiple Risk Factor Intervention Trial (MRFIT). Int J Epidemiol 1991; 20:690-7.
- Simons LA, Friedlander Y, McCallum J, Simons J, Powell I, Heller R, et al. The Dubbo study of the health of elderly: correlates of coronary heart disease at study entry. J Am Geriatr Soc 1991; 39:584-90.

Carwash Injuries

To the Editor: I wish to report a case in which a carwash injury led to a traumatic hyphema in an 11-year-old boy. The patient came to my office with a left eye injury that he received at a local coin-operated carwash. A friend had been washing his mountain bike with the "turbo-washer" when the pedal of the bicycle began spinning rapidly. The reflector on the pedal became dislodged, ricocheted off the concrete, and struck the boy in the eye. On examination there was an extensive soft tissue trauma around the orbit, visual acuity only to light, a small corneal abrasion, and a hyphema filling about one-third of the anterior chamber. The boy was hospitalized and subsequently regained normal vision in the eye.

Hyphemas generally occur in young men and are the result of trauma from projectiles. Not surprisingly, hyphemas also tend to occur in the spring and summer when young men are exposed to projectiles (e.g., balls).^{1,2} Carwashes have not been recognized as a potential cause of traumatic hyphema. The practice of washing mountain bikes in a carwash is relatively new. According to Specialty Equipment West (Salt Lake City, Utah), coin-operated carwashes develop 1000 psi at the nozzle, a pressure that certainly could damage the eye.

There is a small but definite body of research on the health effects of carwashes. Aside from the obvious deleterious effects on driving performance from waxed windshields, more subtle risks have been reported. One Scandinavian study noted very high concentrations of organic solvents in the air of carwashes.³ A case of carwash tachycardia was reported in 1981,⁴ which, thankfully, turned out only to be an artifact on a Holter monitor. In the days of implanted defibrillators, however, carwash tachycardia might lead to carwash defibrillation.

Regardless of whether one decides to have a clean car or bicycle, carwashes must be approached with the same caution we exercise with other technologies of modern living.

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References

- 1. Kennedy RH, Brubaker RF. Traumatic hyphema in a defined population. Am J Ophthalmol 1988; 106:123-30.
- 2. Agapitos PJ, Noel LP, Clarke WN. Traumatic hyphema in children. Ophthalmology 1987; 94:1238-41.
- Niemela R, Pfaffi P, Harkonen H. Ventilation and organic solvent exposure during car washing. Scand J Work, Environ Health 1987; 13:424-30.
- Smith CR Jr, Elbaum D. Car wash tachycardia [letter]. Ann Intern Med 1981; 95:122-3.

Colposcopy Training

To the Editor: It is with great interest that I read the article by Ferris and Miller entitled "Colposcopy Practice and Training in Family Practice Residency Programs."¹ The article provides good documentation of training, educational programs, and strategies, as well as colposcopic resource materials and equipment.

I performed a similar study in spring 1990, which was conducted approximately 1 week later. My survey instrument was only 1 page and contained fewer questions. It also contained a self-addressed stamped return envelope. The return rate was 75 percent. The most significant difference found was 59 percent of programs provided colposcopy training as opposed to the 45 percent reported by Ferris and Miller. These data are reported in *Family Medicine*.² The geographic distribution of these programs providing training are also reported as well as the regional differences.

Our conclusions are essentially the same: family practice residencies are meeting the needs of our trainees in providing colposcopy training, and it is critical for us to establish guidelines for quality assurance. My concern is that since these two studies were carried out within 1 week of each other, what is the true number of programs providing training? Is it possible that some of the respondents to Drs. Ferris and Miller's study did not respond to my inquiry and, indeed, the number of programs providing training is actually higher than that reported by either Ferris and Miller or myself?

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- 1. Ferris DG, Miller MD. Colposcopy practice and training in family practice residency programs. J Am Board Fam Pract 1992; 5:153-6.
- 2. Gordon P. Colposcopy training in family practice residency programs. Fam Med 1991; 23:310-2.