

DC On-line

Brian Sutton, DC

Differences in Back Pain Causes between Teenagers and Adults

A report in a recent Archives of Pediatrics & Adolescent Medicine details a study that finds differences in seemingly similar painful back conditions between teenagers and adults groups.

About half of the adolescents exhibited spondylolysis, while adults showed this sign only five percent of the time. Disc herniation or degeneration was seen in about half the adults, but only 11 percent of the teens.

This could lead to problems if doctors routinely treat teens the same as adults, as is suspected. While no intervention (such as rest or immobilization) is the newest medical treatment for adult back pain, fractures could theoretically be aggravated by continued physical stress. The majority of the young adults who were exhibiting back pain were athletes, especially gymnasts.

Bad News for CAs in Pennsylvania

The 1994 Pennsylvania Health Occupational Wage Survey¹ has been released. While chiropractors did not make the list of top 10 wage earners, chiropractic assistants made another list: the 10 lowest annual salaries among health care workers.

In fact, CAs came in dead last in earnings at an average of \$15,603 -- behind nurse's aides, veterinary, optometric, and dental assistants. Laboratory assistants make over 30 percent more per year in that state.

Could the reason be that a CA's job is so rewarding in and of itself that competition keeps the wages down? Well, I guess you can rationalize just about anything.

The top earners for the year were orthopedic surgeons at \$234,568, followed by radiologists and ophthalmologists.

Multiple Choices Confound the Experts

An Ontario study of family medical practitioners, brain surgeons, and elected politicians, all forming medical treatment plans or health care policy, has yielded some interesting results. It seems that the more options the physicians had available, the more likely they were to stay with the usual treatment.

The same phenomena has long been known to apply to students and the public at large, but this study has shown that highly trained physicians suffer from the same judgment pitfalls. Researchers from Stanford and Princeton Universities reporting in the Journal of the American Medical

Association say that the more treatment options that are available to a physician, the more likely he is to stay with the status quo -- which may not be the best option.

Body Has Anti-HIV Agents that Are "More Powerful" Than Any Drugs

At the second national conference on human retroviruses and related infections in Washington DC, research was presented that showed how naturally-occurring compounds in the body can suppress the HIV virus.

A statement was made by the director of the National Institute of Allergy and Infectious Diseases, who conducted the study, that "... the immune system may be more powerful than any antiretroviral agent in containing the spread of [the] virus over a long period of time."

The NIAID, part of the National Institutes of Health, is working toward controlling AIDS by enhancing the host reaction.

Inactivity Causes Immune System to Suffer

Eight student volunteers in France, participating in a study for an aerospace program, have shown that prolonged bed rest can weaken your resistance to viruses and tumors.²

The study found that their immune cell count fell up to 50 percent after two weeks in bed, then remained at that level. The college students were isolated and kept recumbent, with their feet slightly elevated.

Hispanic Diet Healthier

A study published in the January 26th American Journal of Public Health proposes that Mexican-born women immigrants who eat foods prepared in ways traditional to their culture (not Taco Bell-style food) are better nourished than the average American woman.

These women also have other healthier habits, such as smoking and drinking less and avoiding coffee. The combination of these factors, say researchers, explains the low infant mortality rates among this group.

However, the overall health of these women drops dramatically as their diet and lifestyle become Americanized.

Staggered Exercise Still Beneficial

For those of you who can't seem to scrounge up half an hour for an exercise program three times per week, there still may be a way to raise your general health status. A report in the Journal of the American Medical Association³ says that scattered exercise throughout the day will still lower the risk of heart disease.

The trick, they say, is to accumulate at least 30 minutes of exercise every day -- at least as intense as brisk walking. While this may not increase your level of physical fitness measurably, it does seem to offer some of the cardiovascular benefits of other exercise programs.

The Brain Needs Iodine

A Chinese study of villages that are noted for their high incidence of brain defects such as cretinism has shown that a lack of iodine may be the causative factor.

Researchers supplemented the diets of pregnant women during the first six months of their pregnancy and found that severe brain and behavior problems dropped from nine to two percent. Those villages all had very low levels of dietary iodine available.⁴

The Blind Still Need Light

Research at Brigham & Women's Hospital in Boston is confirming what some people have suspected for a long time -- that the eyes not only receive visual information, but sense light through a different pathway to stimulate the pineal gland.

This light sensing mechanism tells the body when it's day and night, helping to regulate melatonin levels and therefore sleep patterns.

The study suggests that blind people who have their eyes removed for cosmetic or other reasons may be setting themselves up for insomnia and other biorhythm-related problems.⁵

Asthma on the Rise

Since 1982, cases of asthma have increase in persons aged 5-34 years by 40 percent. Health officials blame the increase on air pollution and lack of ventilation in modern buildings.

Some researchers are now examining the possibility that increasing rates of deaths from asthma are caused by narcotics dulling "the body's sense of shortness of breath."⁶

About five percent of the U.S. population suffers with asthma.

Federal Body Weight Guidelines Too Heavy

In 1990, the federal government issued new body weight guidelines that suggested an additional 15 pounds over previous guidelines was not detrimental to one's health. Now it appears that may have been an erroneous conclusion, prompted in part by a faulty insurance study.

A report published in the Journal of the American Medical Association⁷ finds that a five and one-half foot woman who weighs 130 or more pounds has a 20 percent increased risk of cardiovascular disease compared to lighter women. Those who weigh up to 180 pounds double their risk, and

above that the rate climbs by a factor of 3 1/2.

The 1990 guidelines suggest that up to 187 pounds is acceptable for a woman of that same height.

The data that influenced the 1990 revisions failed to take into account the fact that many thin people are smokers or have chronic wasting diseases. Their high mortality made overweight people appear to have no disadvantage in terms of longevity.

Other studies have shown that lowered body weight correlates almost directly with longer life.⁸

Lack of Social Support a Health Risk

Studies published in *Psychosomatic Medicine* suggest that poor physical health is related to lack of social support such as family ties or friendships. For example, such persons are more likely to succumb quickly to HIV infection. Close-knit families and a strong religious faith appears to help open-heart surgical patients.

This lack of social support is said to be as damaging as smoking, obesity, and high blood pressure.

References

1. For more information, contact Scott Burkett or Jack McGettigan of the Pennsylvania Department of Labor & Industry, (717) 787-7530.
2. Reuters news story, Jan. 26, 95.
3. JAMA, Feb. 1, 1995.
4. United Press International, Jan. 2, 95.
5. New England Journal of Medicine, Jan. 5, 95.
6. Dr. David Mannino, Respiratory Disease Researcher for the CDC.
7. JAMA, Feb. 8, 1995.
8. Including a study by the Harvard School of Public Health, released December 1993.

Brian Sutton, DC
Tampa, Florida

