

The Alliance Update

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Alliance Chiropractic &
Wellness Clinic
Chiropractic-Massage-
Naturopathic Medicine

**Health
Newsletter**

Manual Therapy vs. Surgery for Carpal Tunnel Syndrome

Source: European Journal of Pain 2017; 21: 1266-1276.



Carpal Tunnel Syndrome (CTS) is a common condition caused by compression of the median nerve within the carpal tunnel (found in the wrist). CTS can cause considerable pain and disability. Carpal tunnel syndrome symptoms usually start gradually. The first symptoms often include numbness or tingling in the thumb, index and middle fingers that comes and goes. Symptoms can then progress to pain in the wrist, arm, and hand.

A recent study was the first to compare the effects of manual therapy and surgery for improving pain sensitivity and temperature sensitivity in patients with CTS. The authors also sought to determine if changes

in pain intensity that occur after manual therapy or surgery are associated with changes in pressure and thermal pain sensitivity.

One hundred women were recruited, and randomly assigned to either the surgery or manual therapy treatment groups. Patients who received manual therapy exhibited a greater decrease in pain intensity at 3 months compared to the surgical group. However, no significant between-group differences were observed at 6, 9, and 12 months. Both groups exhibited large within-group effect sizes at all follow-up periods. This means that both groups showed significant improvements in the measures of pain sensitivity.

Clinical Application & Conclusions:

Both groups demonstrated significant and clinically important decreases in CTS pain intensity from baseline to follow-up, particularly at the 6, 9 and 12 month follow-up time periods. The between-group differences were not significant at mid-to-long-term follow-up. However, the manual therapy group exhibited a greater decrease in pain intensity at 3-month follow-up, compared to the surgery group (this may have something to do with recovery from the surgery itself?).

The results of this study have potential implications for clinical practice: the use of the manual therapy program in this trial had equal outcomes to surgery at mid- to long-term follow-up. This result is different from previous studies showing that carpal tunnel decompression surgery provides superior long-term outcomes to conservative treatment for CTS. However, previous studies comparing these two interventions have primarily used localized interventions such as splints, laser, ultrasound, or injections. Based on these results, a trial of conservative care is indicated.

More Trees Mean Fewer Asthma Attacks

www.express.co.uk/life-style/health/880449/asthma-symptoms-attack-pollution-trees-cities



The most polluted urban areas in the UK had less hospital visits for asthma attacks when there were lots of trees in their neighbourhood, according to a University of Exeter study.

Respiratory health could be improved by planting more trees in the most polluted parts of the country, the researchers stated. Planting just three extra trees in the equivalent space of one football pitch could result in 50 fewer emergency asthma cases per 100,000 residents, the study revealed.

There is a greater risk to asthma patients in areas of high air pollution, as the pollutants - from traffic, smoke or dust - can irritate and inflame airways.

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Coffee: Does It Have Health Benefits?

Source: Discover Magazine - By Erica Tennenhouse | March 7, 2018



Two large umbrella reviews of the health effects of coffee were published last year. The verdict was that coffee drinking is linked to lowered risk of diseases like type 2 diabetes, heart disease, specific types of cancer, liver disease, Parkinson's, Alzheimer's, and depression. Above all, coffee drinkers were less likely to die early from any cause. With the possible exception of drinking coffee while pregnant, there were no negative effects to speak of.

Although studies are beginning to converge on the benefits of coffee, it is hard to ignore the often-opposing findings. A major culprit has been that pesky variable of genetic diversity among study participants, which surprisingly, is rarely considered.

Heart attacks are a prime example. For a long time, drinking coffee was thought to raise the risk of heart attack. But when researchers finally decoded the gene responsible for breaking down caffeine, they found that the risk was only heightened for those with the slow caffeine metabolism version of the gene.

Although coffee is often equated with caffeine, the two are not synonymous. A seemingly simple cup of coffee is actually a complex blend of more than a thousand chemical compounds, including caffeine, chlorogenic acids and diterpenes.

Peter Martin, the founder of the Vanderbilt University Institute for Coffee Studies, says that people are starting to accept that coffee has health benefits. The next logical question for scientists to ask is how?

Currently we do not know how coffee reduces the risk for certain diseases, and the answers may be as numerous as the diseases in question. Caffeine seems to be responsible for protecting coffee drinkers against Parkinson's, for instance, but when it comes to guarding against type 2 diabetes, you are just as well off if you prefer decaf. Clearly, there is more to it than caffeine alone.

Many of the compounds found in coffee are antioxidants. That means they protect our cells by disarming dangerous molecules called reactive oxygen species (ROS), which can damage our DNA and proteins. "It's easy to assume it's a general mechanism, such as antioxidants, that works for practically every disease," says Martin, but these antioxidant effects are probably just one piece of the puzzle.

Coffee may have health benefits, but how many cups should you be knocking back on a daily basis?

Recent headlines have touted 3 to 4 cups per day as optimal. That number was linked to the best outcomes for multiple diseases in one of the big review articles published last year.

Taking that number as a one-size-fits-all guideline is problematic because aside from ignoring genetic differences, there is also the issue of what 'a cup of coffee' means chemically. It could mean a big cup or a small cup, instant coffee or fresh brewed, and a light, medium, or dark roast. Each version of a cup contains different levels of biologically important chemicals like caffeine, yet most of what we know about coffee and health still comes from studies that measure coffee consumption in terms of cups.

Dirty Dozen

EWG's 2017 Shopper's Guide to Pesticides in Produce™

Source: https://www.ewg.org/foodnews/dirty_dozen_list.php#.WrWA5ojwblU

Environmental Working Group (EWG) analyzed pesticide residue testing data from the U.S. Department of Agriculture and Food and Drug Administration to develop rankings for popular fresh produce items. Below are the worst dozen produce items for pesticide residue. You may want to consider organic options for these items.

- | | | | | | |
|----------------|-----------|--------------|-------------|-----------------|-------------|
| 1 Strawberries | 2 Spinach | 3 Nectarines | 4 Apples | 5 Peaches | 6 Pears |
| 7 Cherries | 8 Grapes | 9 Celery | 10 Tomatoes | 11 Bell Peppers | 12 Potatoes |

Italian Study Links Cellphone Radiation to Heart and Brain Tumors

Source: <https://www.ewg.org/release/italian-study-links-cellphone-radiation-heart-and-brain-tumors#.WrV9l0jwblU>



Laboratory animals exposed to cellphone radiation developed heart and brain tumors similar to the types seen in some studies of human cellphone users, according to an Italian study published recently. The Environmental Working Group (EWG) said the findings reinforce the need for people, especially children, to exercise caution when using cellphones and other radiation-emitting devices.

The study by the Ramazzini Institute, published in the journal *Environmental Research*, supports the findings of the federal National Toxicology Program (NTP). Last month, the NTP reported that male rats exposed to radio-frequency radiation at levels including those emitted by cellphones had a greater chance of developing malignant brain cancer and tumors in the heart and other organs.

“The Italian study reinforces the need for a precautionary approach when it comes to radiation from phones and other devices, especially for young kids,” said Olga Naidenko, Ph.D., senior science advisor at EWG. “Children’s bodies develop through the teenage years and may be more affected by cellphone use. As new telecom networks are built around the country, in-depth assessment of children’s health risks from cellphone radiation is essential.”

EWG has been at the forefront of public interest organizations raising concerns about connections between cellphone use and cancer. EWG’s 2009 Science Review on Cancer Risks and Children’s Health summarized comprehensive studies showing a variety of health harms linked to long-term cellphone use. This included increased risk of brain tumors; lower sperm counts, motility and vitality among men; neurological effects; and changes in brain metabolism.

While the public debate on cellphone radiation risks has focused on cancer, which progresses slowly in response to lifelong exposure, a growing body of research suggests that even shorter exposures could cause harm. In a study published last year, Kaiser Permanente researchers reported that pregnant women exposed to radio-frequency radiation from sources such as wireless devices and cell towers had nearly a threefold greater frequency of miscarriage.

In December 2017, the state of California issued official guidelines advising cellphone users to keep phones away from their bodies. The state Department of Public Health also recommended that parents consider reducing the amount of time their children use cellphones, and encourage kids to turn the devices off at night.

Statins in the Elderly: Evidence-Based or Not?

Source: Statins in the Elderly: Evidence-Based or Not? T. G. Bartol, Medscape, Mar 12, 2018.



Recently, secondary data from the SPRINT blood pressure trial evaluated statin use in elderly trial subjects without diabetes. One group was given statins and another group was not. The groups were compared for primary events including heart attack, stroke, heart failure, or cardiovascular related death.

Of 3,054 patients in the study (mean age 77 years), 44.2% were taking statins at baseline. The primary event rate was 8.1% without a statin and 6.3% with a statin: essentially a risk reduction of 1.8% in statin users. The average time to an event without a statin was 753.8 days versus 669.2 days when on a statin, a nonsignificant difference of 84.6 days.

The researchers concluded from these findings that statins would offer no benefit in the primary prevention of cardiovascular disease (CVD) in adults over age 65.

Although the evidence points to a reduction in cardiovascular events when statins are used for primary prevention, the absolute risk reduction is often small and the studies have not shown a reduction in overall death rates. Some studies even show a correlation of higher cholesterol levels at baseline in people over age 65 with lower all-cause and non-cardiovascular death rates.

The Choosing Wisely campaign has issued a statement on statins in those over age 75, saying there is "no clear evidence that high cholesterol leads to heart disease or death" in this population. Furthermore, some studies show that people with the lowest levels of cholesterol have the highest risk of death

Little Evidence Supports Use of Digital Rectal Exam

Source: Little Evidence Supports Use of Digital Rectal Exam - Medscape - Mar 13, 2018.

Digital rectal examination (DRE) inadequately identifies risk for prostate cancer on a population level, according to a meta-analysis that compared DRE indications of elevated risk with biopsy outcomes.

DRE and prostate-specific antigen measurement form the basis of population screening for elevated risk for prostate cancer. Both procedures may be part of a well-care visit to a primary care provider.

Studies have suggested DREs are associated with a high rate of false-positives and no reduction in prostate cancer mortality, while subjecting patients to unnecessary and invasive follow-up procedures and perhaps over diagnosis and overtreatment of prostate cancer. Despite questions about DRE benefits, a recent survey found that 81% of primary care physicians in Canada report using it in their clinics.

Therefore, to better understand the effect of DRE, Leen Naji, MD, from the Department of Family Medicine at McMaster University (Hamilton, Ontario) and colleagues conducted a systematic review and meta-analysis of the diagnostic accuracy of DRE administered in the primary care setting as a screen for prostate cancer.

Their meta-analysis, published in the March/April issue of the Annals of Family Medicine, included 7 studies that enrolled a total of 9,241 patients who underwent DRE. Diagnosis of prostate cancer was based on prostate biopsy.

The investigators conclude that DRE as performed by primary care providers does not meet the World Health Organization criterion of benefits of a screening test outweighing harms.

"On the basis of the lack of evidence supporting its use, we do not recommend routinely using DRE as a screening tool for prostate cancer in primary care, unless it is proven effective in future studies. Additionally, although we did not study possible harms of DRE, its invasiveness and potential to lead to unnecessary biopsy, over diagnosis, and overtreatment argue against its routine use" the researchers conclude.

Clinic Services

1. Chiropractic Care
2. Laser Therapy
3. Electrical Therapy
4. Sports Injury Care
5. Custom Foot Orthotics
6. Massage Therapy¹
7. Naturopathic Medicine
8. Acupuncture

Clinic Hours²

Please note:

1. Massage therapy is available outside core office hours.

Monday 8:00am— 12:00pm 3:30pm - 7:30pm

Tuesday 8:00am— 12:00pm

Wednesday 8:00am— 12:00pm 3:30pm –7:30pm

Thursday 3:30pm –7:30pm

Friday 8:00am – 12:00pm

Announcements

- Check out our WEBSITE at www.alliancechiroandwellness.com. You can find archived issues of our newsletter as well as other clinic information. Please note appointment requests should be made by calling the office at 905-648-0661. We do not accept appointment cancellations, bookings, or reschedules via our web site. These should be done by calling the office directly.
- Like us on *Facebook!* To receive the latest in health news, research, updates, and announcements, check us out at www.facebook.com/AllianceChiropracticandWellnessClinic

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