

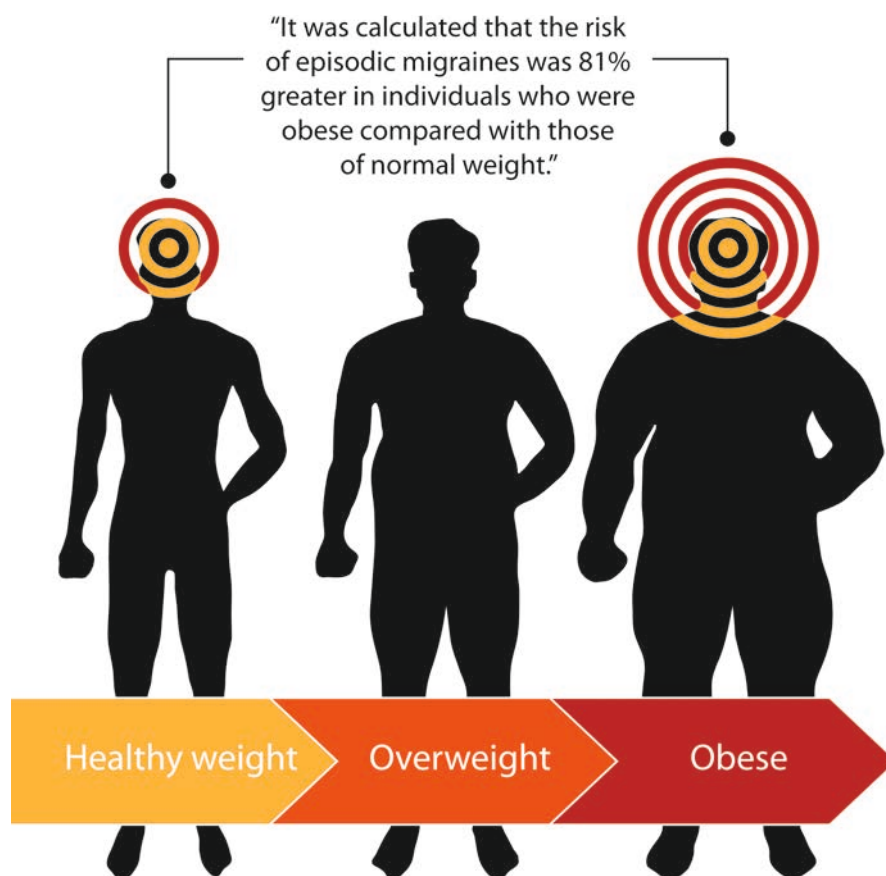
Obesity could increase the risk of episodic migraines

A study conducted at the Johns Hopkins School of Medicine (MD, USA) has provided findings that suggest that individuals who suffer from episodic migraines (EMs) are more likely to be obese. The results of the study were published in a recent issue of *Neurology*.

A total of 3862 participants, who had an average age of 47 years, were interviewed in the National Comorbidity Survey Replication, in which they were asked to disclose their weight, height and how often they suffered from migraines. It was recorded that 188 participants suffered from episodic or

occasional migraines. It was calculated that the risk of EMs was 81% greater in individuals who were obese compared with those of normal weight. The team also observed that there was a significant trend of increasing risk of EMs with increasing obesity status from normal weight to overweight to obese. By performing stratified analyses, the researchers demonstrated that the risk of EMs increased in obese individuals in comparison with individuals of normal weight, those younger than 50 years of age or of female gender.

Study author, Lee Peterlin, from Johns Hopkins School of Medicine, corresponded



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with *Clinical Practice*, speaking of the unique nature of the study conducted: “By contrast to some of the previous studies, looking at this association in this study we were able to exclude remitted migraineurs and nonmigraine headache participants from the control group, which may have contributed to our ability to detect this association.”

This study concluded that obesity may be an underlying risk factor for an increased frequency of EMs. Clinicians can therefore take this observation into consideration and offer their patients advice that involves modifying lifestyle choices including regular exercise and following a healthy diet. Peterlin spoke of the future implications of the study expressing

that the results “...should stimulate further research as to the efficacy of weight loss therapies for migraine prevention.”

– Written by Simi Thankaraj

Source: Peterlin LB, Rosso AL, Williams MA *et al*. Episodic migraine and obesity and the influence of age, race, and sex. *Neurology* doi:10.1212/WNL.0b013e3182a824f7 (2013) (Epub ahead of print).



New hope for pain relief in osteoarthritis using bisphosphonates

Research carried out at St George's, University of London (UK) has given new hope to the possibility that a drug usually taken by osteoporosis sufferers may have the potential to provide pain relief in patients suffering with knee and hip osteoarthritis.

Osteoporosis is a rheumatic disease characterized by fragile bones that is also often very painful. The joint condition results in bony growths, cartilage damage and sore tissue. Nidhi Sofat, senior researcher of the study, commented that, “Osteoarthritis is the most common form of arthritis worldwide. It causes damage to bone and cartilage in the joints of affected people. Most treatment is focused around pain relief, as no robust treatments have been discovered that slow down the progression of the disease.”

Bisphosphonates are commonly prescribed to patients with osteoporosis, as they have the ability to change the

structure of bone. There has been speculation for some time that bisphosphonates could also be used to reduce joint pain and discomfort in patients with osteoarthritis. Researchers at St George's, led by Sofat, looked at past studies in patients being treated with a variety of bisphosphonates for hand, knee, spine or hip osteoarthritis.

Sofat explained, “Our study looked at whether there were any bisphosphonate drugs that have been shown to influence pain and/or disease progression that could be used in osteoarthritis treatment.” The researchers found that, out of 3832 patients studied, most bisphosphonate drugs provided limited pain relief.

Despite this disappointing general finding, some specific forms of bisphosphonates did appear to have some effectiveness at managing pain associated with osteoarthritis. Specifically, the use of zoledronate

and alendronate for 6 months appeared to improve knee and hip osteoarthritis. In addition, alendronate may even be more effective than existing pain relieving drugs for the relief of pain relating to hip osteoarthritis.

“More research needs to be carried out to determine which patients could benefit most from this type of intervention,” Sofat concluded. “Osteoarthritis is a long-term chronic condition, so it is essential that we work to understand whether the use of these medicines in the long term could be tolerated.”

– Written by Sophie Breeze

Sources: St George's, University of London news: www.sgul.ac.uk/media/latest-news/bisphosphonates-could-offer-effective-pain-relief-in-osteoarthritis-research-finds; Davis AJ, Smith TO, Hing CB, Sofat N. Are bisphosphonates effective in the treatment of osteoarthritis pain? A meta-analysis and systematic review. *PLoS ONE* 8(9), e72714 (2013)



Pain management may be hampered by stoicism and cognitive impairment

Dementia and stoicism have been identified as potential barriers to effective long-term pain management in an article recently published in the journal *Nursing Older People*.

The inability, or unwillingness, of patients to communicate their pain to care workers owing to sensory (i.e., hearing and vision deficit) or cognitive (i.e., delirium and

dementia) impairment could lead to patients being at risk of suboptimal treatment. The study of nurses working in care homes in Ireland noted that a significant barrier to providing appropriate pain relief is caused by patient attitudes, including patients trying to hide their pain.

Pain relief can only be given when caregivers are aware of a patient's pain, and so

the researchers commented, “It is therefore essential that patients are encouraged to verbalize their pain to family and care staff.” Another barrier to pain management identified in the study was misunderstandings on the part of caregivers when observing the behavior of some patients, in particular in patients suffering from dementia. For example, care staff may mistake

behavior caused by pain as behavior caused by dementia itself, leading to the inappropriate prescription of antipsychotic medication.

In order to overcome the barriers identified in the study, the researchers suggest that all caregivers working in long-term care

facilities should be in a program of ongoing education on pain. They emphasize that caregivers should be specifically trained to treat and diagnose pain in patients suffering from dementia, utilizing observational tools such as the Abbey pain scale.

– Written by Sophie Breeze

Sources: Egan M, Cornally N. Identifying barriers to pain management in long-term care. *Nurs. Older People* 25(7), 25–31 (2013); AlphaGalileo Foundation news: www.alphagalileo.org/ViewItem.aspx?ItemId=134569&CultureCode=en



How does hormone-replacement therapy affect the risk of breast cancer?

A recent study has shed some light on the combined effect of hormone-replacement therapy (HRT), BMI, ethnicity and breast density on the risk of developing breast cancer.

Ningqi Hou and colleagues from the University of Chicago (IL, USA) have published an article in the *Journal of the National Cancer Institute* in which they considered how these factors can influence the risk of developing breast cancer in postmenopausal women, in order to identify patients who might benefit from the use of HRT without increased risk of breast cancer.

The authors considered 1,642,824 screening mammograms representing 9300 breast cancer cases from the Breast Cancer Surveillance Consortium and they analyzed

the impact of HRT on breast cancer risk stratifying according to ethnicity, BMI and breast density.

Hou and colleagues reported that the use of HRT was associated with a 20% increase in breast cancer risk in white, Hispanic and Asian women, but not in black women. Furthermore, the risk of developing breast cancer was high when HRT was used in women with low or normal BMI and women with higher breast density. Combining the two factors, Hou and colleagues observed that the breast cancer risk was lower when HRT was used in women with both a high BMI and low breast density.

These findings indicate that although HRT is normally considered to increase

the risk of developing breast cancer, there may be categories of patients, such as black women, obese women and women with low breast density, who may be able to use HRT to relieve postmenopausal symptoms without increasing their risk of breast cancer.

Since this study did not consider in detail the type and duration of HRT, further detailed studies are needed to clearly identify which drugs can be used safely in different ethnic groups of postmenopausal women.

– Written by Marco DeAmbrogio

Source: Hou N, Hong S, Wang W, Olopade OI, Dignam JJ, Huo D. Hormone replacement therapy and breast cancer: heterogeneous risks by race, weight, and breast density. *J. Natl Cancer Inst.* 105(18), 1365–1372 (2013).



Surveillance mammograms contribute to reduce racial disparities in breast cancer survival

Disparities in survival in racial and ethnic minorities after breast cancer treatment remain a serious public health issue. A recent study published in *Medical Oncology* investigated the impact of surveillance mammography.

Zhannat Nurgalieva and colleagues at the University of Texas (TX, USA) analyzed 28,117 cases of primary breast cancer diagnosed in elderly women identified from the SEER data. The authors evaluated if surveillance mammography in elderly breast cancer survivors after treatment for breast cancer could be a method to help alleviate the disparity in survival in women of different race/ethnicity.

Nurgalieva and colleagues observed that a higher proportion of white women (74.9%) received surveillance mammography compared with Asian (69.3%), African-American (71.7%) and Hispanic women (72.5%); moreover, women who had received a surveillance mammography within the previous 2 years had lower mortality rates compared with women who had not had any mammography during that period. Nevertheless, when the hazard ratio was considered after adjusting for surveillance mammography, cancer-specific mortality in black and Hispanic women was elevated but was not significantly different from white women; instead, when the

hazard ratio was considered, all-cause mortality resulted lower in Asian and Hispanic women compared with white women.

The authors conclude that although surveillance mammography can help to reduce racial and ethnic disparities in survival in breast cancer survivors, further studies are warranted to identify other factors that may explain the ethnic/racial disparity in breast cancer survival.

– Written by Marco DeAmbrogio

Source: Nurgalieva ZZ, Franzini L, Morgan R, Vernon SW, Liu CC, Du XL. Surveillance mammography use after treatment of primary breast cancer and racial disparities in survival. *Med. Oncol.* 30(4), 691 (2013).