

Single and multiple hip, vertebral and rib fractures strongly affect the quality of life of older adults over a prolonged period of time, according to a new study published in the Journal of Bone and Mineral Research.

# Ovarian cysts should be 'watched' rather than removed, study suggests

Women may not need to undergo surgery for noncancerous ovarian cysts, avoiding potential surgical complications.

This is the finding of new research, by a team of international scientists from institutions including Imperial College London and KU Leuven — a research university in the Dutch-speaking town of Leuven in Flanders — Belgium published in The Lancet Oncology, sciencedaily.com wrote.

The two-year study followed 1919 women from 10 different countries, including the UK, Belgium, Sweden and Italy, who were diagnosed with non-cancerous ovarian cysts.

Ovarian cysts are fluid-filled sacs that develop on a woman's ovary. They're very common and usually don't cause any symptoms. However, in some cases they can trigger pelvic pain and bloating.

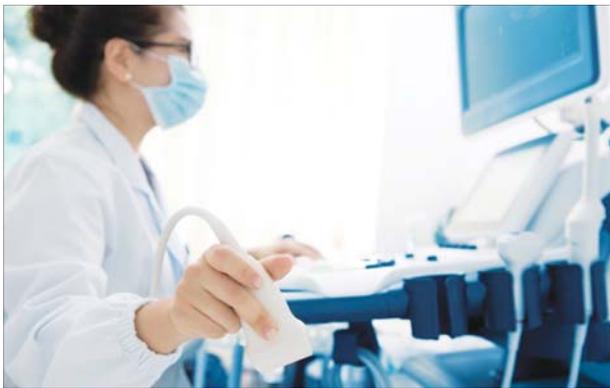
Doctors refer patients with these symptoms for ultrasound scans, where the cysts are classified as benign (noncancerous), or cancerous tumors. In the event of suspected cancer, the cysts are always removed and analyzed.

In the case of cysts that are thought to be benign, women are still often recommended to have the cysts surgically removed. This is because it has been thought that there is a risk of serious complications such as the cyst bursting, or causing the ovaries to twist. There have also been concerns that benign cysts may 'turn cancerous' if left in place or that a cyst may have been misclassified at the initial ultrasound scan.

However, an alternative to surgery is so-called 'watchful waiting', where doctors do not remove the cysts, but monitor their size and appearance with regular ultrasound scans. This is because many cysts shrink and disappear or do not change over time.

Opinion is still divided on watchful waiting, with many doctors across the world believing benign cysts should be surgically removed in the majority of cases.

This latest study is the largest to date on the 'watchful waiting' approach, which followed nearly 2,000 women as they were scanned in the years after a benign cyst diagnosis.



medicalnewstoday.com

Out of the 1919 women in the trial, one in five (20 percent) had cysts that disappeared of their own accord, and 16 percent underwent surgery. Overall, in 80 percent of cases either the cyst resolved or did not need intervention. The average age of the women in the study was 48, and the average size of the cyst was four centimeters.

Only 12 women were subsequently diagnosed with ovarian cancer, making the risk of cancer 0.4 percent. However, the researchers caution this may be due to the tumors being initially misdiagnosed as noncancerous on the initial ultrasound scan, rather than a benign cyst turning cancerous.

The rate of other complications, such as ovarian twisting or cyst rupture was 0.4 percent and 0.2 percent respectively.

The research team say these risks must be assessed alongside the risks of surgical removal. The risk of complications, such as bowel perforation, for

surgical removal of cysts among women aged 50-74 is between three and 15 percent.

Professor Dirk Timmerman, lead author from KU Leuven explained, "Despite these surgical risks being small, if the women in this age group underwent surgery in our study then we could speculate that 29 to 123 of them could have suffered severe surgical complications. Instead, only 96 of them underwent surgery, which means severe complications may have been avoided in between 29 to 123 women."

Professor Tom Bourne, lead researcher from Imperial College London said this study suggests watchful waiting is suitable for most women when an ovarian cyst is initially classified as being benign.

"Our results may lead to a paradigm shift resulting in less surgery for noncancerous ovarian cysts — on condition that trained ultrasound examiners reliably exclude cancer."

## Study: Dementia risk factors not known by half of UK population

Half of UK adults cannot identify any key risk factors for dementia, according to a study by Alzheimer's Research UK.

The charity surveyed 2,361 people and found that only one percent were able to name the seven known risk or protective factors for dementia, BBC wrote.



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The six risk factors are heavy drinking, genetics, smoking, high blood pressure, depression and diabetes.

Physical exercise is a protective factor against the disease.

The study, entitled Dementia Attitudes Monitor, found that more than half of UK adults now know someone with dementia.

But only half recognized that dementia is a cause of death, and they found that a fifth incorrectly believe it is an inevitable part of getting older.

Although a third of cases of dementia are thought to be influenced by factors within our control, only 34 percent of people surveyed believe it is possible to reduce the risk of dementia, compared with 77 percent for heart disease and 81 percent for diabetes.

Hilary Evans, the chief executive of Alzheimer's Research UK, said that despite growing dementia awareness, there was still a lot of misinformation.

"It is a sad truth that more people are affected by dementia than ever before and half of us now know someone with the condition," she said.

"Yet despite growing dementia awareness, we must work harder to improve understanding of the diseases that cause it."

Sue Strachan is 63 and lives in Herefordshire. She was diagnosed with vascular dementia in 2014.

"I wasn't very fit when I was diagnosed with dementia and my GP advised me to take up exercise to try to manage my condition," she said.

"I do wish I'd started earlier, because good heart health can have such a positive impact on the brain. I can see that society's view of dementia is improving, but I still experience misunderstanding about the condition — not least that there's nothing that can be done to help."

Sue ran last year's London Marathon for Alzheimer's Research UK to help raise awareness.

The charity said reducing the number of people who believe that dementia is an inevitable part of ageing is 'key', as "this belief drives other negative attitudes towards dementia".

"Our findings show that those who believe dementia is an inevitable part of ageing are less likely to see the value in seeking a formal diagnosis, and are less likely to engage with research developments that could bring about life-changing treatments and ultimately, a cure."

The study found key groups of people whose understanding of dementia is lower, including those from black, Asian and minority ethnic backgrounds, and adults under 24 and over 65.

There is not currently a test for dementia, but the survey found that if there was a breakthrough in research, 85 percent would be willing to take a test through their doctor before symptoms showed.

## Certain characteristics linked with depression before, after giving birth

Depression during pregnancy and following childbirth (perinatal depression) is a common and potentially severe condition.

In a Journal of Neuroscience Research study, researchers examined subgroups of women followed from pregnancy to six months postpartum, for example comparing those with depression only after childbirth with those experiencing depression during pregnancy, eurekalert.org wrote.



babycenter.com

Several characteristics were associated with depression before and after giving birth, including smoking prior to pregnancy and suffering from migraines or premenstrual syndrome.

Various other characteristics were unique to depressive symptoms at different time points before and after giving birth.

The findings suggest that different perinatal depression trajectories have different characteristics, which could be used to create individualized treatment options.

"We are glad that our study of this complex phenomenon contributes further information on the possible pathways and pathogenesis of depressive symptoms in the perinatal period," said lead author Dr. Anna Wikman, of Uppsala University, in Sweden.

"The results also suggest a need for individualized advice and possibly different treatment approaches for different patient subgroups; however, we do believe further studies are needed to deepen our understanding of these issues."

## Study: Blood protein contributes to memory loss in Alzheimer's disease

A protein found in blood could be the key to identifying the cause of Alzheimer's disease, a new study said.

When fibrinogen leaks into the brain they activate and program immune cells that severe neuron-to-neuron synapses, leading to memory loss, according to a study published in Neuron.

Those synapses are important for neurons to communicate with one another, UPI wrote.

"We found that blood leaks in the brain can cause the elimination of neuronal connections that are important for memory functions," Katerina Akassoglou, a professor of neurology at University of California at San Francisco and study senior investigator, said in a news release.

"This could change the way we think about the cause and possible cure of cognitive decline in Alzheimer's disease and other neurological diseases."

The destruction of these synapses is associated with Alzheimer's disease and other dementias. During an experiment



RIFF/SHUTTERSTOCK

with mice, the researchers were able to stop fibrinogen from activating the brain's immune cells in the first place, keeping their memories intact.

This discovery takes a detour from past research that suggests tau buildup in the brain causes Alzheimer's disease.

"Traditionally, the buildup of amyloid plaques in the brain has been seen as the root of memory loss and cognitive decline in Alzheimer's disease," said Mario Merlini, a staff research scientist in Akassoglou's laboratory at Gladstone Institutes and study first author of the study.

"Our work identifies an alternative culprit that could be responsible for the destruction of synapses."

In past research, researchers developed an antibody that blocks the ability of fibrinogen to coningle with the brain's immune cells.

Now they want to use the current study's findings to help make breakthroughs in treating other conditions.

"These exciting findings greatly advance our understanding of the contributions that vascular pathology and brain inflammation make to the progression of Alzheimer's disease," said Lennart Mucke, the director of the Gladstone Institute and study coauthor.

"The mechanisms our study identified may also be at work in a range of other diseases that combine leaks in the blood-brain barrier with neurological decline, including multiple sclerosis, traumatic brain injury and chronic traumatic encephalopathy. It has far-reaching therapeutic implications," Mucke said.

## Greater efforts needed to address cancer therapies' effects on bone health



mountsinai.org

A new British Journal of Clinical Pharmacology review examined the impact of cancer therapies on the skeleton and how to limit bone loss and fractures in cancer patients treated with these therapies.

The review noted that efforts to limit the effects of cancer therapies on bone have nearly universally employed antiresorptive agents that reduce bone turnover, and studies have not typically assessed whether these

medications reduce patients' fracture risk, medicalxpress.com wrote.

In addition, despite clearly written and straightforward guidelines, vulnerable elderly patients are often neither identified nor provided with appropriate treatments to limit the skeletal impact of their cancer therapies.

"While providers of cancer therapies are rightfully focused on optimizing care approaches for cancer

treatment, it is important that providers also recognize that many of these same therapies have effects that extend beyond the cancer itself," said coauthor Dr. Matthew T. Drake, of the Mayo Clinic.

"The skeleton is one of the most important organs affected by cancer therapies, and the early judicious use of approaches to limit these off-target skeletal effects is critical to long-term patient health."