

Brain pressure disorder that causes headache, vision problems on rise

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A new study has found a brain pressure disorder called idiopathic intracranial hypertension is on the rise, and the increase corresponds with rising obesity rates. The study is published in the January 20, 2021, online issue of *Neurology*. The study also found that for women, socioeconomic factors like income, education and housing may play a role in their risk.

Idiopathic intracranial hypertension is when the pressure in the fluid surrounding the brain rises. It can mimic the symptoms of a brain tumor, causing chronic, disabling headaches, vision problems and in rare cases, vision loss. It is most often diagnosed in [women of childbearing age](#). Treatment is often weight loss. In some cases, surgery may be required.

"The considerable increase in [idiopathic intracranial hypertension](#) we found may be due to many factors but likely mostly due to rising obesity rates," said study author William Owen Pickrell, Ph.D., M.R.C.P., of Swansea University in Wales

in the United Kingdom and a member of the American Academy of Neurology. "What is more surprising from our research is that [women](#) who experience poverty or other socioeconomic disadvantages may also have an [increased risk](#) independent of obesity."

For the study, researchers used a national healthcare database in Wales to analyze 35 million patient years of data over a 15-year period, between 2003 and 2017. They identified 1,765 people with idiopathic intracranial hypertension during that time. Of the group, 85% were women. Researchers recorded body mass index measurements for study participants. Body mass index is calculated by dividing weight by height. For every one person with the disorder, researchers compared three people without it who were matched for gender, age and socioeconomic status.

The socioeconomic status of each person with the disorder was determined by where they live, using a national scoring system that considers factors like income, employment, health, education and access to services. People in the study were then divided into five groups ranging from those with the fewest socioeconomic advantages to those with the most.

Overall, researchers found a six-fold increase in the number of cases of the disorder over the course of the study. In 2003, for every 100,000 people, 12 were living with the disorder, compared to 76 people in 2017. Also, in 2013, for every 100,000 people, two were diagnosed during that year, compared to eight people in 2017.

Researchers found that the increasing number of people living with the disorder corresponded to rising [obesity rates](#) in Wales during the study, with 29% of the population being obese in 2003 compared to 40% in 2017.

"The worldwide prevalence of obesity nearly tripled

between 1975 and 2016, so while our research looked specifically at people in Wales, our results may also have global relevance," said Pickrell.

There were strong links for both men and women between body mass index and risk of the disorder. For women, there were 180 cases per 100,000 people during the study for those with high body mass index compared to 13 women with a body mass index considered to be ideal. For men, there were 21 cases per 100,000 among those with a high body mass index compared to eight cases for those with an ideal body mass index.

Researchers also found that for women only, [socioeconomic factors](#) were linked to risk. There were 452 women in the group with the fewest socioeconomic advantages compared to 197 in the group with the most. The women in the group with the fewest had a 1.5 times greater risk of developing the disorder than women in the group with the most, even after adjusting for body mass index.

"Of the five socioeconomic groups of our study participants, women in the lowest two groups made up more than half of the female participants in the study," said Pickrell. "More research is needed to determine which socioeconomic factors such as diet, pollution, smoking or stress may play a role in increasing a woman's risk of developing this disorder."

A limitation of the study was that researchers identified the [socioeconomic status](#) of participants by the regions in which they lived instead of obtaining individual socioeconomic information for each participant.

Provided by American Academy of Neurology

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