

Genetic connections between autism and cancer



Many scientists believe there are possible links between autism and other conditions. Diabetes and Alzheimer's are two often-discussed examples, but is there a similar connection between autism and cancer?

While it's important for us to reassure you up front that having autism in no way means a person will develop cancer, assessing potential connections can be invaluable. Let's take a look at the available information, so we can understand the situation in more detail.

Why might autism and cancer be connected in some way?

Autism is associated with high rates of what are known as genomic aberrations. To put it as simply as possible, a genomic aberration is when chromosome numbers in a cell differ from what would be considered the expected or 'normal' amount. This can happen in a few different ways.

Certain types of cancer are also associated with genomic aberrations, which is why scientists decided to delve deeper into the two.

What have studies shown?

Published in 2005, one American study explored the possibility that people with autism are more likely to contract cancer due to their shared risk factors.

Scientists looked at a wide range of data collected between 1999 and 2005, with subjects aged between 3 and 21 years old. Their theories were confirmed somewhat by a high correlation between autism and breast cancer diagnoses.

On the other hand, however, there were almost no significant correlations found between autism and 23 other female and 22 male cancers.

It's since been established that mutations in PTEN, which were once thought to be a cancer gene, are a potential cause of autism. From these findings, dozens more genes have been linked to both.



What conclusions can we draw?

While there is, according to this research, a higher risk of breast cancer for people with autism, there doesn't appear to be a higher risk of contracting the illness on the whole. What's more intriguing is the evidence showing that similar mutations can cause both things. This discovery has sparked a new theory that approved cancer medications could be used to help people with autism.

Scientists admit, however, that they've barely scratched the surface when it comes to understanding what autism and cancer have in common. Hopefully, more will be uncovered in the near future.

