Researchers examine autism differences in boys versus girls

By Pierre Dumont, Tech Times | February 27, 5:50 PM

A group of geneticists may have found an explanation as to why autism is more likely to strike boys than girls.

For a long time it has been clear that autism strikes boys more frequently than girls. When girls have autism, they tend to be more severely affected than boys.

According to a study published Thursday in the American Journal of Human Genetics, boys get autism from a comparatively small genetic component, while girls develop the condition from a stronger genetic hit. Accordingly, girls are worse off when they do develop autism.

"In the male, maybe more subtle things are enough to create a disorder," said geneticist Jean-Louis Mandel of the College de France in Paris and the Academic Hospital in Strasbourg, France, according to USA Today.

For the study, researchers examined over 16,000 people. They found that autism is occurring less often in females, rather than being missed completely.

About seven males with mild autism exist for every female, with the gender gap being smaller for more severe cases.

The study also indicated that the mutations behind autism either come from the parents or are new ones that develop in the child.

According to the study’s lead researcher geneticist Evan Eichler of the University of Washington, the find marks one more piece in the puzzle that is autism, and will one day lead to new diagnoses and treatments.

Around 500 genes have been associated with autism, and those fit into around a dozen pathways, leading to different treatment approaches.

"It’s going to be really important to know which pathway your child is in," Eichler said. "I would put money on it that not all drugs and not all behavioral treatments will work the same depending on the basis for how that child developed autism."

The researchers claim that the study is sufficiently large and well-executed. But despite the study’s findings, some believe that factors other than genes play a roll in autism development. According to Ira Hertz-Picciotto, epidemiologist at the University of California, Davis and director of the school’s MIND Institute Program in Environmental Epidemiology of Autism and Neurodevelopment, the hormones a fetus is bathed in during pregnancy could also play a role in male vulnerability.

"Boys are swimming in measurably more testosterone than girls are," she said. "Some evidence suggests that social behaviors are in part determined by such early life exposure to sex steroids."