Research discovers link between epilepsy and autism

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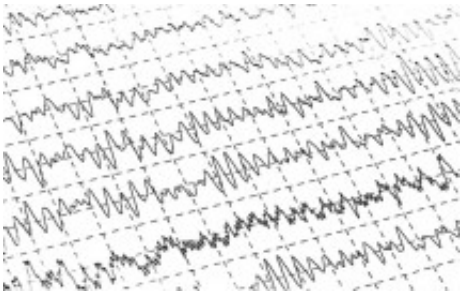

Brain wave on electroencephalogram.

(Medical Xpress)—University of Bath researchers have found a previously undiscovered link between epileptic seizures and the signs of autism in adults.

Dr SallyAnn Wakeford from the Department of Psychology revealed that adults with epilepsy were more likely to have higher traits of autism and Asperger syndrome.

Characteristics of autism, which include impairment in social interaction and communication as well as restricted and repetitive interests, can be severe and go unnoticed for many years, having tremendous impact on the lives of those who have them.

The research found that epileptic seizures disrupt the neurological

function that affects social functioning in the brain resulting in the same traits seen in autism.

Dr Wakeford said: "The social difficulties in epilepsy have been so far under-diagnosed and research has not uncovered any underlying theory to explain them. This new research links social difficulties to a deficit in somatic markers in the brain, explaining these characteristics in adults with epilepsy."

Dr Wakeford and her colleagues discovered that having increased autistic traits was common to all epilepsy types, however, this was more pronounced for adults with Temporal Lobe Epilepsy (TLE).

The researchers suggest that one explanation may be because anti-epileptic drugs are often less effective for TLE. The reason why they suspect these drugs are implicated is because they were strongly related to the severity of autistic characteristics.

Dr Wakeford carried out a comprehensive range of studies with volunteers with epilepsy and discovered that all of the adults with epilepsy showed autism traits.

She said: "It is unknown whether these adults had a typical developmental period during childhood or whether they were predisposed to having autistic traits before the onset of their epilepsy. However what is known is that the social components of autistic characteristics in adults with epilepsy may be explained by social cognitive differences, which have largely been unrecognised until now."

Dr Wakeford said the findings could lead to improved treatment for people with epilepsy and autism. She said: "Epilepsy has a history of cultural stigma, however the more we understand about the psychological consequences of epilepsy the more we can remove the

stigma and mystique of this condition.

"These findings could mean that adults with epilepsy get access to better services, as there is a wider range of treatments available for those with autism condition."

Margaret Rawnsley, research administration officer at Epilepsy Action welcomed the findings.

She said: "We welcome any research that could further our understanding of epilepsy and ultimately improve the lives of those with the condition. This research has the potential to tell us more about the links between epilepsy and other conditions, such as autism spectrum disorders."

Provided by University of Bath