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Autism Susceptibility Genes Identification by Linkage Analysis: A Review

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ABSTRACT Autism is a complex neuropsychiatry disorder that is heterogeneous both in its phenotypic expression and etiology. It is characterized by deficits in verbal communications, impairments in social interactions, and repetitive behaviors. Family studies have shown that autism runs in families and twin studies indicate that the basis of that familial aggregation is genetic. Numerous strategies are currently being employed to attempt to locate autism susceptibility genes-like linkage and candidate gene approaches, and during past decade several whole genome scan were carried out for the identification of autism susceptibility loci. These GWS and linkage studies have identified a number of suggestive loci most notably-2q, 7q, 15q11-13, 17q and Xq, but the results have been inconclusive and fine mapping and association studies have failed to identify the underlying genes. The purpose of this review is to evaluate the current status of autism susceptibility gene research.