Genetic factors play a pivotal role in the development of Schizotypal Personality Disorder (SPD), with current research highlighting specific genetic markers associated with the condition. Studies have identified the Catechol-O-methyltransferase (COMT) gene and the calcium voltage-gated channel subunit alpha1 C (CACNA1C rs1006737) as significant contributors to SPD, indicating a genetic predisposition that affects brain function and development (Ref-u937426). Moreover, genetic predispositions to schizotypy have been observed, with heritability rates ranging from 18 to 48% in children of mothers diagnosed with schizophrenia, underscoring a familial risk factor (Ref-u937426). This genetic vulnerability is compounded by the interplay of environmental factors, which can exacerbate the expression of schizotypal traits. Consequently, understanding the genetic underpinnings of SPD provides essential insights into its etiology, facilitating the development of targeted interventions and preventive measures that address both genetic and environmental influences.