

## RISK OF PSYCHIATRIC DISORDERS IN HYPOSPADIAS - A NATIONWIDE SWEDISH COHORT STUDY

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**Introduction:** Even though 0.3-0.8% percent of the male population are born with hypospadias, it is not known if this is associated with an increased risk for psychiatric morbidity later in life.

**Aims:** The aim of this study was to assess the association between hypospadias and risk of psychiatric disorders in affected individuals.

**Methods:** The association between hypospadias and psychiatric disorders was examined in a population-based cohort study using Swedish registers. Individuals born in Sweden between 1973 and 2009 were included in the study. Among them, 11,156 patients with hypospadias were identified and matched with 1,098,714 distinct controls by year of birth and county. The following outcomes were evaluated: 1- suicide attempt, 2- psychotic, 3- mood, 4-anxiety, 5- eating, 6- personality disorders, 7- disorders due to psychoactive substance use, 8- ADHD, 9- pervasive developmental disorders, 10- intellectual disabilities, and 11- other childhood emotional disorders.

**Results:** After adjusting for socio-economic and perinatal factors, malformations and/or genetic syndromes, patients with hypospadias were more likely to be diagnosed with pervasive developmental disorders (OR 1.4; 95% CI 1.1-1.6), intellectual disabilities (OR 1.8; 95% CI 1.6-2.1), ADHD (OR 1.2; 95% CI 1.0-1.4) and other childhood emotional disorders (OR 1.3; 95% CI 1.1-1.4) compared to the controls. No relation between other psychiatric diagnosis and hypospadias was found.

**Conclusion:** Hypospadias is associated with an increased risk of neurodevelopmental disorders.