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Neurobiological influences on suicide

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Suicidal behaviour is a complex phenomenon that results from the interaction of different factors. Although the observation that propensity to suicide is hereditary dates back to the 18th century (Moore, 1790), only more recently have we begun to understand that genetic factors increase predisposition to suicidal behaviour, in part independently from psychopathology, and likely, by modifying at-risk behaviours such as impulsive–aggressive traits. Although precise neurobiological changes underlie the suicide process, we remain at the early stages of their identification. Studies suggest alterations in serotonin and other monoamines, and in neurotrophines and stress-response systems, such as the HPA and polyamines.

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