

Tourette and the Roman Emperors

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The Gts gene is thought to be related to a general disinhibition of behaviour as seen in Tourette syndrome. It is also associated with very positive traits such as increased musical ability, physical coordination, creativity, and leadership traits. The Gts gene is thought to have been prevalent in the Roman Julio-Claudian clan. Members of this clan gave rise to the first five emperors of Rome and some may have manifested typical Tourette syndrome as well as other traits associated with the Gts gene. This is discussed by reviewing the scandalous history of the five generations of the Julio-Claudian clan that ran the Roman empire. The Gts gene seems to have had a less than salutary effect on the Julio-Claudian rulers of Rome, with an exception or two.

It's a sordid tale of ambition, incest, family violence, and murder. The Julio-Claudian clan, from which arose the first five emperors of Rome, were involved in one scandal after another, and perhaps fortunately for posterity managed to exterminate themselves within five generations.

It now appears that this behaviour may have been influenced by a genetic trait related to Tourette syndrome. Classically, Tourette syndrome is a common hereditary behavioural disorder characterized by motor and vocal tics and in some cases compulsive swearing. The tics can be suppressed briefly and symptoms usually start before age 21. It is more common in the male sex and may affect up to 1 in 100 school boys.

Gts GENE

Dr. David E. Comings in his book "Tourette Syndrome and Human Behavior," also remarks that families of Tourette sufferers tend to have other unusual behaviours. These have included unusual sexual behaviour, violence, abuse (especially within the family unit), obses-

sive compulsive tendencies, anxiety disorders, manic depression and even schizophreniform symptoms. This appears to be related to a general disinhibition of behaviour caused by the so-called Gts gene which is inherited in a semidominant-semirecessive pattern. Those who carry two copies of the gene tend to have more classic and severe Tourette syndrome. Those who carry only one copy range from showing no symptoms at all, up to a moderate typical Tourette picture.

Interestingly, the Gts gene can also be associated with very positive traits such as increased musical ability, physical coordination, creativity and leadership traits. Comings feels that the Gts gene is over-represented both in the great achievers of our society as well as those on the lower end of the spectrum.

CLAUDIUS

There is good evidence that the third Roman Emperor, Claudius may have had typical Tourette syndrome(4). He manifested tics and stuttering as well as compulsive behavioural traits and unusual sexual behaviour. His last marriage was an incestuous one to his own niece, Agrippina II, and he was a compulsive womanizer. He proved however to be a capable administrator of the Empire with meticulous attention for detail and fi-

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nances. His achievements ranged from the completion of the conquest of Britain to reform of the aqueducts. He also did find time to write several important histories. Claudius' father, Drusus, may have been an asymptomatic carrier of the Gts gene although one may speculate that his reputation as a popular leader and great general may have been due at least in part to the "energizing" effects of the gene.

Looking at the rest of Claudius' family tree we see numerous examples of behaviour which may be explained by the Gts trait. Interestingly, this unusual behaviour did not seem to occur in the Julian side of Augustus' family - the side descended from his first marriage to Scribonia.

AUGUSTUS

The problems of Augustus, the first Emperor of Rome, seem to have begun with the family of Livia (Claudius' grandmother). Livia was a noted beauty in her youth whom he married after divorcing his first wife. Their union was apparently barren of children, though she had one son from a previous relationship and bore a second one three months after marrying Augustus (ostensibly fathered by her former spouse). Livia was a strong, forceful personality and no doubt was helpful to her husband's political career. Though nothing has been definitely proven, there are dark mutterings in ancient texts questioning why numerous potential heirs to Augustus' empire all seemed to die mysteriously. This opened the way for Tiberius, Livia's oldest natural son

(and Claudius' uncle), to take power after Augustus' demise. It is said that Augustus was so fearful of poisoning near the end, that he would only drink from a flowing stream and eat figs off the tree. Livia is alleged to have had poison injected into the figs on the tree, resulting in her spouse's timely death.

TIBERIUS

Tiberius now took power. A good general and able administrator, he ran the Empire well for many years showing an obsessive concern for the finances of the state. Towards the end of his reign, however, he became more and more reclusive. He retired to the island of Capri, where it was said he indulged in his favourite sexual perversions including a fondness for high born adolescent girls. During this time the Pretorian guard captain, Sejanus, attempted to seize power. He seduced Livilla, who was Tiberius' niece and Claudius' sister and convinced her to poison her husband (who was also her first cousin). Tiberius was warned and a blood bath followed in which many were executed for being suspected of sympathy with Sejanus' cause.

CALIGULA

Caligula also appears to have had Tourette syndrome. The Roman historian Suetonius describes what are almost certainly motor tics, though he makes the common error of believing them to be under voluntary control. It is stated that "he (Caligula) worked hard to make

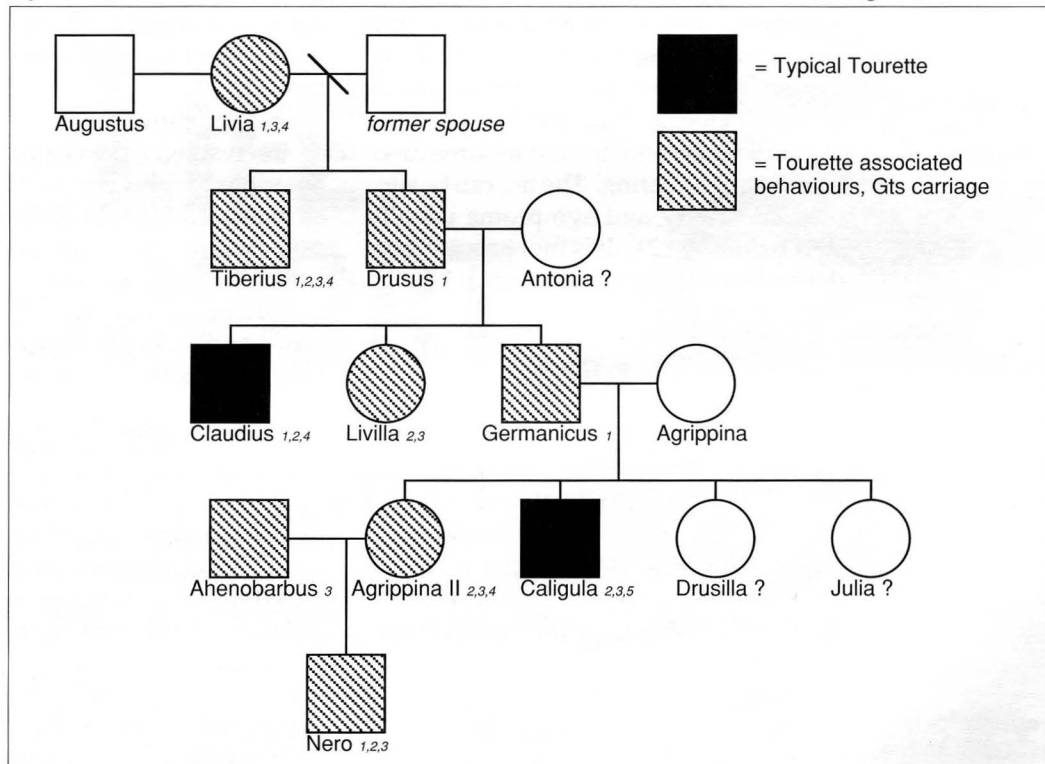


Figure 1 - The family tree of the first five emperors of Rome: *Small italic numbers identify Tourette associated characteristics: 1= positive traits; 2= incest, hypersexuality; 3= violence; 4= obsessive-compulsive traits; 5= psychotic symptoms.*

his face even more repulsive by practicing fearful and horrifying grimaces... "

Coprolalia, the compulsive use of foul language, also appears to have been present, for "...whenever he (the guard captain, Cassius Chaerea) demanded the watch word, Caligula used to give him 'penis' or 'vagina'." In addition, copropraxia, or the use of obscene gestures, also associated with Tourette's, was in evidence. Caligula, again in dealing with his poor guard captain "...always stuck out his middle finger for him to kiss and wiggled it obscenely."

Of course a family history of Tourette syndrome in his uncle Claudius and his male gender also predisposed to the possibility of Tourette syndrome in the Emperor.

In addition Caligula also had many of the Tourette-associated behaviours. For example, he manifested unusual sexual behaviour including "incest with his sisters" and he "made advances to almost every woman of rank in Rome."

He had the disturbed sleep patterns often found with Tourette syndrome, rarely getting more than "three hours of fitful sleep a night." He was violent and had a violent temper, executing among many others, his father-in-law, and his cousin Gemellus. He reputedly even poisoned his grandmother Antonia as well. To keep the food bills down in his private menagerie he used to feed condemned criminals to the animals. Caligula cheerfully acknowledged paternity of his infant daughter because of her violent temper when "...she would try to scratch her playmates' faces and eyes."

Caligula manifested some schizophreniform behaviour, which is seen in about 12% of Tourette syndrome cases. This included such bizarre activities as having discussions with the god Jupiter in public, attempting to appoint his horse to high political office in Rome, and marching his troops into the ocean to collect sea shells.

Positive Tourette-associated traits may have included the Emperor's "remarkable eloquence and quickness of mind" and his "practicing many arts," including singing and dancing.

Perhaps not surprisingly, Caligula was assassinated by his long-suffering Captain of the Guard, who was no longer able to tolerate the Emperor's insulting and demeaning behaviour.

Caligula's father was Germanicus, the brother of Claudius. History records Germanicus as a virtuous, energetic and popular man, an able general who was greatly mourned by the Roman populace after his death. It would seem in his case that possible carriage of the Gts gene may have amplified his natural abilities and virtues. This was not however true of his children.

NERO

Germanicus' daughter, Agrippina II, seduced her uncle Claudius and convinced him to adopt her son Nero. Nero's deceased natural father, Ahenobarbus, was a cousin of Claudius, noted for his temper and impulsive

violence, as well as incestuous and adulterous behaviour. Claudius was subsequently poisoned with mushrooms, and after Nero was safely ensconced as Emperor, his two cousins, Claudius' ill-fated natural children, were to follow his demise. Though there were whisperers that Nero and his mother were perhaps also incestuously involved, this did not prevent the young Emperor from having Agrippina II assassinated. As her murderers approached she asked ironically to be stabbed in the uterus.

Nero, from a young age, exhibited a certain amount of musical and poetic talent and at least initially was an able ruler. To the end, he remained popular with the general public, despite his vicious persecution of Christians and rumours that he was responsible for the burning of Rome. His sexual propensities both for men and women were notorious though were certainly nothing new to the Roman public, jaded with the escapades of his predecessors. Nero was fond of having wealthy Roman citizens brought up on charges and executed when he became a little short of cash. This allowed him to confiscate their estates and add to his own coffers. Perhaps this was the reason for the revolt in 68 A.D., which ultimately forced the Emperor to commit suicide.

The subsequent ruling families of Rome were never again to prove as interesting. In fact, for a hundred years after Nero, the Emperors of Rome were by and large a virtuous and capable lot.

CONCLUSION

In conclusion, the Gts gene seems to have had a less than salutary effect on Julio-Claudian rulers of Rome, with an exception or two. The gene may in fact underlie much of the psychopathology we see today. Like a two-edged sword, however, Gts may also be an energizing factor behind much of human growth and development, disproportionately represented in the best and worst of human society.

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