

Aggression in Down's syndrome

Racheal Johnson *MBChB*, Amir Javid *MBBS, MSc, MRCPsych*, Manoj Narayran *MBBS, MMedSci, MRCPsych*, Dasari Michael *FRCPSych*

It has been speculated that there is a personality/behavioural phenotype among people with Down's syndrome, although research has been inconclusive. There is little evidence to support severe psychotic disturbance and aggressive behaviours being common in the Down's syndrome population. This case is that of a 24-year-old male with Down's syndrome who showed abnormally aggressive behaviours. He was kept in the community without psychiatric review, partly due to his behaviours being overlooked as he had a learning disability.



The Down's syndrome population has been shown to develop less psychopathology¹ than other learning disabled groups. However, some studies have shown rates of psychiatric disorders as high as 22%,² the most common being depressive disorders, as well as disruptive behaviours and anxiety disorders. There is a low level of severe psychiatric disturbance such as severe depression, psychotic symptoms or severe self-injury.³

Comparison of behavioural profiles has shown Down's syndrome persons are less likely to develop maladaptive behaviours and show aggressive behaviours when compared to learning disability groups of other aetiologies.^{4,5} A Finnish study showed that, of a population of 129, only 9% had shown severe irritability, disturbing behaviour and physically attacked others, and 4% had been difficult to manage or even dangerous to others.³ These aggressive behaviours were statistically significant amongst male patients rather than females.

Case presentation

Daniel is a 24-year-old male with Down's syndrome. He had been taken into police custody for threats to kill and attempt to make

criminal property damage. In the middle of the night he had walked to his aunt's home and had thrown a brick at her window to attempt to gain access. The noise he made woke up his aunt and she called the police. He disclosed to the police that he intended to kill her. Daniel was moved to a residential home on bail as his parents were unable to care for him. During his assessment by police he disclosed that he was experiencing auditory hallucinations telling him to commit these acts. Psychiatric services were involved and the community mental health nurse's assessment concluded that Daniel was not suffering from any acute psychiatric disturbance and that he was not observed to be responding to unseen stimuli or complaining of ongoing auditory hallucinations whilst in custody. It was clear there was a breakdown in Daniel's relationship with his aunt: he expressed anger and resentment towards her but it was unclear what had caused this. Daniel was not referred for further assessment by a psychiatrist as it was speculated that his behaviour could reflect a difficult family dynamic. The team focused on finding a safe place for Daniel to stay in the community that could meet and support his needs.

There is no previous family history of psychiatric disorder and no history of illicit drug or alcohol use.

Mental state on admission

Daniel presented with anxiety and complained of somatic chest pain and heartburn when he was asked difficult questions. His speech was of normal rate, rhythm and volume but he developed a stammer when he became anxious, thus finding it difficult to answer questions. He described his mood as happy but objectively he presented as euthymic with evidence of anxiety at times. No evidence of any delusion or paranoid ideas. He reported hearing the voices of his aunt and grandmother, which are inside his head telling him "he is dirty, he is evil". This appeared as pseudo-hallucinations (Daniel reported that his grandmother and his aunt used to tell him these things when he was a child.) He appeared to lack insight into his mental health problems. He was not observed responding to any unseen stimuli on the unit. No evidence of thoughts to self-harm or harm to others.

Daniel has a history of forensic violence. When he was 19 he locked his aunt in her bathroom and poured bleach on the carpet and tried to set it alight. He went missing following this event but returned to his father's house in the morning. Around this time, he was accessing a community day centre but after trying to attack another service user with an iron bar he lost his placement there. When he was 23 he

smashed a vase and held it towards his personal assistant's young granddaughter, making threats to harm her. He also poured bleach over her school uniform. No formal prosecution was made against him.

Daniels' parents separated due to domestic violence, which he witnessed. He lived with his mother and grandmother but due to increasingly demanding and challenging behaviour his mother struggled. He attacked staff and children at school, so during his teenage years he went to live with his father. The challenging behaviours appeared to regress. However, his father has alcoholism and subsequent physical health issues so his aunt helped care for Daniel.

During Daniel's time at the residential home he escaped and attempted to return to his aunt's house in the middle of the night. Thankfully he had put his shoes on incorrectly, causing him to intermittently trip over, and he was spotted by a police patrol car. The sergeant at the station took it upon himself to contact the local learning disabled psychiatric consultant for advice and it was quickly realised that Daniel needed formal assessment of his mental health and to assess his capacity to understand his acts, so he was admitted under Section 2 of the Mental Health Act.

Outcome

Daniel's presentation and progression on the unit remained settled with euthymic mood and appropriate affect. He was never seen responding to unseen external stimuli and did not disclose auditory hallucinations to staff. Psychology assessment rated his IQ as less than 35, however Daniel struggled to engage with this assessment and the team intended to repeat it at a future date. There was one incidence where he called an ambulance and when he had his mobile telephone removed he became

aggressive and damaged property in his room. He then targeted a female staff member with verbal abuse and threats to kill her. Again he disclosed to doctors that he was hearing voices that encouraged his behaviour but at no point during his admission has he been seen to be responding to any external unseen stimuli. Daniel was commenced on fluoxetine for anxiety. He often displayed anxious behaviours before a visit from his family; he would get physical symptoms such as nausea, often accompanied by self-induced vomiting and abdominal or chest pain. There was no cause for chest pain or nausea found on medical review and investigations such as ECG and routine blood tests. No formal diagnosis of severe depression or psychotic symptoms was made. He has been known to punch himself severely enough to leave bruises. When questioned again he attributes the self harm to hearing voices. Daniel explains that he can hear female voices he believes to be his aunt and grandmother that degrade him and shout at him to engage in aggressive behaviour towards others or himself. His family deny any knowledge of abuse by his aunt or grandmother.

Discussion

Even though Daniel's behaviour was not described as constantly challenging he had collected a history of aggressive actions over time. These were often in response to denying his demanding behaviours but were also a mix of violent outbursts and planned attacks. These calculated and premeditated attempts on his aunt exceed the proposed level of learning disability Daniel has. An element of diagnostic overshadowing contributed to overlooking psychotic symptoms. This could have been fatal for his aunt if the police sergeant had not contacted the psychiatrist directly. Even though the Down's syndrome population has a low incidence of these severe acute

psychiatric conditions it is important to always assess for true psychosis.

It is important to differentiate between true auditory hallucinations and pseudo-hallucination. It is possible that Daniel was not experiencing true auditory hallucinations but memories from previous experiences or thought ego. He will require speech and language therapy and psychology assessment to work through his emotions towards his aunt, in order to gather more information for assessment of these voices.

The follow-up to this report would be to observe the incidence of other Down's syndrome patients with forensic history and those trialled within the criminal justice system to compare the nature of their crimes. This could make an interesting review.

Dr Johnson is a FY2, Dr Javaid is a Speciality Doctor in Psychiatry, Dr Narayan is a Consultant Psychiatrist in Learning Disabled, and Dr Michael is a Consultant Psychiatrist and Medical Director of the Humber Trust; all work at Townend Court, Hull, Yorkshire.

Declaration of interests

No conflicts of interests were declared.

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