Can Asperger’s syndrome be confused with schizophrenia?

Hans Asperger was keen to differentiate autistic personality disorder from schizophrenia, and noted that, 'While the schizophrenic patient seems to show progressive loss of contact, the children we are discussing lack contact from the start' (Asperger 1944, p.39). However, in the past and still today, some young adults with Asperger’s syndrome are referred for a psychiatric assessment for schizophrenia.

A person with Asperger’s syndrome may develop what appear to be signs of paranoia, but this may be an understandable response to very real social experiences. Children with Asperger’s syndrome encounter a greater degree of deliberate and provocative teasing than their peers. Once another child has deliberately teased the child with Asperger’s syndrome, any subsequent confusing interaction with that child can cause the child with Asperger’s syndrome to make the assumption that the interaction was intentionally hostile. This can eventually lead to long-term feelings of persecution and the expectation that people will have malicious intent.

One of the concerns of clinicians is differentiating between the anticipated consequences of an impaired or delayed Theory of Mind, and the paranoia and persecutory delusions associated with schizophrenia. A recent study examined the potential link between impaired or delayed Theory of Mind and paranoia in young adults with Asperger’s syndrome (Blackshaw et al. 2001). An incident such as being ignored by a friend could be conceptualized in terms of the situation (he did not see you, was in a hurry, etc.) which uses the circumstances as an explanation; or it could be conceptualized in terms of his mental intentions (he didn’t want to talk to you, or he wanted to make you feel embarrassed or ignored). The study used a series of tests and questionnaires to measure the degree of impaired Theory of Mind and paranoia. The individuals with Asperger’s syndrome scored lower on tests of Theory of Mind and higher on measures of paranoia than normal controls, but an analysis of the results of the study found that the paranoia was due to impaired Theory of Mind abilities, and was qualitatively different to the characteristics of paranoia observed in people with a diagnosis of schizophrenia. The paranoia was not a defence strategy, as occurs in schizophrenia, but due to confusion in understanding the subtleties of social interaction and social rules.

A subsequent study of persecutory beliefs and Theory of Mind abilities compared people with Asperger’s syndrome with patients with paranoid delusions, and found that the low level paranoid signs observed in some people with Asperger’s syndrome are due to different mechanisms than those involved in psychotic delusion (Craig et al. 2004). A person with Asperger’s
syndrome can develop feelings of persecution and paranoia but there is a qualitative difference between these and the feelings of paranoia that are a sign of schizophrenia.

One of the compensatory mechanisms for a person with Asperger’s syndrome, who may achieve limited social success and understanding, is to create a fantasy life that can include imaginary friends and imaginary worlds in which he or she is understood and socially successful. The contrast between the real and imaginary world can become quite acute during adolescence, and under extreme stress the adolescent with Asperger’s syndrome may create a fantasy world that becomes not simply a mental sanctuary and source of enjoyment, but a cause of concern to others, that the distinction between the fantasy world and reality is becoming blurred. A tendency to escape into imagination as a compensatory mechanism can then become interpreted as a delusional state of mind (La Salle 2003).

I have also noted that some children and adults with Asperger’s syndrome tend to vocalize their thoughts, apparently unaware of how confusing or annoying this can be to other people. The thought vocalization can occur as a means of problem solving, with some adolescents stating that they can improve their thinking by talking to themselves, or the person has difficulty ‘disengaging mind from mouth’. When listening to speech that occurs out of a social context, the content is often a replay of the conversations of the day, in an attempt to understand the various levels of meaning, or as a rehearsal of what to say for some future occasion. When lonely, the adolescent can talk aloud to an imaginary person or friend, and is not necessarily engaged in a dialogue in response to an auditory hallucination.

Problems with the pragmatic aspects of language can also explain a tendency to switch topics that can be confusing to the other person, and could be interpreted as evidence of the thought disorder associated with schizophrenia. If in doubt as to what to say, the person with Asperger’s syndrome may change the topic to something that they know about and would prefer to talk about. Another problem with the pragmatic and semantic aspects of language that occurs with people with Asperger’s syndrome is their making a literal interpretation of a question. A psychiatrist may ask a question such as, ‘Do you hear voices?’ to which Wendy Lawson, who has Asperger’s syndrome, replied, ‘Yes’ - the correct answer based on a literal interpretation of the question (Lawson 1998). After all, she heard voices of people talking around her every day. Her answer contributed to the psychiatrist’s opinion she had schizophrenia.

We know that many children with Asperger’s syndrome think in pictures (Chapter 6) and when I enquire whether such children also have an inner voice, to help them manage an emotion or situation, they are often bewildered and state that they do not have an inner voice or conversation when thinking. This characteristic is probably due to a delay in the self-reflection aspects of Theory of Mind, and probably associated with an immature development of the frontal lobes. Typical children achieve this ability when they are about five years old. However, during adolescence, this attribute can ‘switch on’ for the
first time for a teenager with Asperger's syndrome, who then reports having voices and conversations in his or her head which could be interpreted as a sign of schizophrenia. It is important to distinguish between an inner voice as a natural aspect of thought and problem solving, and the auditory hallucinations of schizophrenia.

Clinicians recognize that severe depression and other mood disorders such as bipolar disorder and anxiety disorders can sometimes lead to psychotic features and mood congruent delusions (Ghaziuddin 2005a). In particular, a person with severe depression may develop auditory hallucinations that are related to the depression, for example voices telling the person to kill himself, but there can be a qualitative difference from the voices associated with schizophrenia. In psychotic depression the voices often talk to the person directly, whereas in schizophrenia the voices usually talk about the person (Ghaziuddin 2005a).

The superficial similarities between some of the signs and consequences of Asperger's syndrome and schizophrenia do not imply that someone with Asperger's syndrome is 'immune' from schizophrenia. There are people with Asperger's syndrome who develop the unequivocal signs of schizophrenia (Ghaziuddin 2005a; Stahlberg et al. 2004). However, Asperger noted that only one of his 200 cases developed clear signs of schizophrenia (Wolff 1995). We have yet to establish the actual co-morbidity of Asperger's syndrome and schizophrenia, but at present there is no evidence in the research literature that schizophrenia is any more common in people with Asperger's syndrome than it is in the general population (Tantam 2000).

There are families that have a child with Asperger's syndrome and a relative diagnosed with schizophrenia (Ghaziuddin 2005b). However, sometimes we cannot be sure if the relative had schizophrenia or the characteristics of Asperger's syndrome that resembled some of the features of schizophrenia. In the past, people with Asperger's syndrome who were referred to an adult psychiatrist who would not have known about Asperger's syndrome, may well have received a diagnosis of atypical schizophrenia (Perlman 2000). I obtained my clinical qualifications during the last days of the large mental hospitals around London that accommodated hundreds of chronic psychiatric patients. With hindsight, I now recognize that some of the patients in the old institutions with a diagnosis of atypical schizophrenia would today be diagnosed as having Asperger's syndrome. If such individuals are now resident in community psychiatric services, they may benefit from a reassessment of their original diagnosis. The family of a person with Asperger's syndrome who has a relative diagnosed with schizophrenia may consider whether the characteristics of Asperger's syndrome are a more accurate description of the person, and whether the original diagnosis should be re-examined by a specialist in adults with Asperger's syndrome.

Further Information:
The explanatory text included in the DSM-IV description of Asperger's syndrome refers to an association between Asperger's syndrome and the
development of an additional or secondary mood disorder, especially depression or an anxiety disorder. Current research indicates that around 65 per cent of adolescents with Asperger’s syndrome have an affective or mood disorder. Perhaps the most common is an anxiety disorder (Ghaziuddin, Wieder-Mikhail and Ghaziuddin 1998; Gillot, Furniss and Walter 2001; Green et al. 2000; Kim et al. 2000; Konstantareas 2005; Russell and Sofronoff 2004; Tantam 2000; Tonge et al. 1999). However, the prevalence of depression is also high (Clarke et al. 1999; Gillot, Furniss and Walter 2001; Green et al. 2000; Kim et al. 2000; Konstantareas 2005). Research has indicated a greater risk of developing bipolar disorder (DeLong and Dwyer 1988; Frazier et al. 2002) and there is evidence to suggest an association with delusional disorders (Kurita 1999), paranoia (Blackshaw et al. 2001), and conduct disorders (Green et al. 2000; Tantam 2000). For teenagers with Asperger’s syndrome, an additional mood disorder is the rule rather than the exception.

Research has been conducted on the family histories of children with autism and Asperger’s syndrome and has identified a higher than expected incidence of mood disorders in family members (Bolton et al. 1998, De Long 1994; Ghaziuddin and Greden 1998, Lainhart and Folstein 1994; Micali, Chakrabarti and Fombonne 2004; Piven and Palmer 1999). The research studies acknowledged the ironic comment that ‘madness is hereditary: you get it from your children’ and examined the parents’ mood states before the child with Asperger’s syndrome was born. We do not know why there is an association between a parent (mother or father) having a mood disorder and having a child with Asperger’s syndrome. Research studies will eventually explain the association.