

Anxiety and depression in people with autistic spectrum disorders

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Slides available at www.aspergersyndrome.info

Social and emotional

Difficulties with:

- Friendships
- Managing unstructured parts of the day
- Working co-operatively

Language and communication

Difficulty processing and retaining verbal information

Difficulty understanding:

- Jokes and sarcasm
- Social use of language
- Literal interpretation
- Body language, facial expression and gesture

Flexibility of thought (Imagination)

Difficulty with:

- Coping with changes in routine
- Empathy
- Generalisation

Typical Asperger syndrome

- Unusual manner, gives immediate impression of idiosyncrasy due to impaired nonverbal expressiveness
- Makes contact on own terms
- May discuss unusual or particular interests
- Problems with unexpected or unclear



Asperger syndrome variant/ atypical autism



- Primary abnormality is lack of empathy, partly due to failure of non-verbal interpretation ('face blindness')
- Ability to make relationships but not to keep them
- Overlap with Tourette, ADHD, dysexecutive syndrome, expressive language problems, dyscalculia
- Developmental hypofrontality?

	Impaired NVE ++	Peer friends	Unusual interests ++	Self-aware
Typical autism	Y	N	Y/lack	N
Asperger syndrome	Y	N/few	Y	Y
Atypical AS	N	N/brief	Y/hidden	Y

Importance of age

- Developmental level
- Changing physique
- Changing social expectations
- Not a life-long condition?

Social impairment waxes and wanes

- Secondary school
- Leaving school
- Not getting work, making relationships
- work problem or redundancy
- Self-neglect after death of parents
- relationship crisis

Neuropsychiatry

- Prefrontal cortex
- Amygdala
- Non-dominant temporal lobe
- Specific structures associated with ToM impairment e.g. orbito-frontal cortex, STS
- However, multiple interlinked impairments make localization premature
 - Considerable overlap with other fronto-striatal-cerebellar disorders
- Network and not focal impairment
 - More, less well connected neurones
 - Larger frontal brain areas from age 1 to 12 or more

Associated developmental disorders

- Dysexecutive syndrome (planning)
- Dyslexia (writing and spelling)
- Dyspraxia (coordination)
- Attention deficit/ hyperactivity disorder (impulsivity, executive functions, task persistence)
- Also links with
 - Tourette syndrome
 - Expressive dysphasia (may lead to elective mutism)
 - Dysgraphia
 - Dyscalculia
 - Topographical disorientation

Prevalence

- Rate in children is currently put at 1 in 300- 500
- No good adult epidemiology
 - Of 437, 800 Sheffield residents aged 13 or over, we identified 112 high scorers on screening questionnaire: rate of 1 in 4000
- An adult rate, 8-10 times less than the childhood rate

Emotional problems in adolescents and adults with
Asperger syndrome
(findings from Sheffield survey of adolescents and adults,
Tantam, Balfe, and Chen)

- Self-harm: thoughts 50%, actual 11%
- Violence: threats 83%, actual 34%
- Bullied 90%, 30% currently (includes adults)
- Majority have anxiety-related disorder

SOCIAL SITUATION

- Only 1 in 5 was in paid work
- 1 in 5 was doing nothing during the day
- Difficulties getting on with people
- Respondents wanted more help with interview skills, using public transport and being on time

Respondents' geographies

- Most living at home, even above 30.
- Most had difficulties coping with changes in everyday environments
- Difficulties moving between places (for example using public transport)
- Most common places frequented were libraries and cinemas

Associated psychiatric disorders

- (Depression and anxiety)
- Bipolar disorder
 - More common in AS
- Brief 'cycloid' psychoses (but not schizophrenia)
- Epilepsy and its complications
 - More common in less able group
- Substance misuse
 - ?linked to group also with ADHD
- Specific problems associated with linked physical disorders e.g. hyperphagia and Prader-Willi syndrome

Associated psychiatric disorders (213 adults with HFA/ AS in personal clinic series)

Schizophrenia	0.5%
Depression	17.8%
Mania	1.4%
Anxiety	43.2%
OCD	7.8%
Substance abuse	6.6%

Why is ASD associated with emotional and psychiatric disorder?

- Chance association
 - Schizophrenia
- Genetic linkage
 - BPD
 - ?anxiety
- Consequence of cognitive deficit
 - Empathy disorder
 - Dysexecutive syndrome
- Consequence of relationship problems
 - Depression in later life
- May be a reaction to social circumstance
 - Bullying
 - Family strain
 - Family environment

Anxiety: a neglected condition

- Types
 - Generalized anxiety
 - Social phobia
 - OCD
 - 'Catastrophic reactions'
- Presentation
 - Exacerbation of 'autistic' symptoms e.g. rituals or routines
 - 'Mood swings'
 - Irritability
 - Regression
- Complications
 - Secondary depression
 - Aggression
 - Brief psychosis
 - Comfort behaviours

Sören Kierkegaard 1813-1855



9 June 07

Zurich

Storm is gathering: the experience of anxiety

Anxiety may be compared with dizziness. He whose eye happens to look down into the yawning abyss becomes dizzy.Hence anxiety is the dizziness of freedom...(Kierkegaard: Concept of Anxiety:61)

"Reality to an autistic person is a confusing, interacting mass of events, people, places, sounds and sights. There seems to be no clear boundaries, order or meaning to anything. A large part of my life is spent just trying to work out the pattern behind everything."

A person with Autism: quoted in *Better Services for People with an Autistic Spectrum Disorder, Nov 2006, DoH*

ANXIETY

Timing of psychological disorders associated with AS (many of these disorders probably greater in more able group)

- Aet 11-13 Surge of anxiety-related problems including OCD, dysmorphophobia, panic disorder
- Aet 16-18 Secondary depression, social phobia
- Aet >16
 - Progressive social withdrawal often attributed to schizophrenia
 - Late adolescence bipolar disorder
 - Brief 'cycloid' psychoses
 - Non-psychotic hallucinoses
- Aet >18 'Catatonia'
- Aet >25 Paranoid states
- Aet >35 Social withdrawal, isolation, relationship disrepair

Depression

- Chronic anxiety
- Grief
- 'Low self-esteem'
 - Shame and humiliation
- Secondary to substance misuse
- ? A complication of ADHD
- Being trapped
- Bipolar disorder

Grief

- May be absent or delayed
- May be more for places or times than people
- Grieving over lost childhood is common
 - Reflected in interests
 - In wanting to be with younger people
 - Ruminations
- Ruminations also serve to put past right
 - Lack of emotional as opposed to cognitive coping

Abuse

- How many people with ASD have been abused?
 - Difficult to establish but possibly a significant no.
 - Suspicion should be raised by deterioration in behaviour, sexual disinhibition, regression
 - Interviewing may be unreliable as people with ASD may not have a clear cut conception of abuse or even of sexually inappropriate behaviour
 - People with ASD may feel that sexual favours are a fair exchange for social contact
 - Need institutional policies for monitoring

'Personality disorder': challenging others

- Post-traumatic symptoms and consequences of marginalization
- Consequences of dysexecutive syndrome
- Identity problems

Causes of anxiety

■ Shame

- Stigmatization
- Marginalization

■ Expectation of attack or criticism

- Social phobia
- Leads to withdrawal and end of social learning/ anxiety immunization

■ Catastrophic reaction

- Annihilation

Reactions to anxiety

- Worsening of symptoms of ASD
- New anxiety related disorder
- Anger
- Imposition of control on others
- Denial or withdrawal
- Depression (self-blame, or hopelessness)
- Long-term relationship problems/ Personality disorder
- Psychosis

Complex anxiety

- Guilt is a form of anxiety
- Shame is an independent emotion but may be misperceived as anxiety
- Shame and guilt can be externalized, particular in men (and in women with AS?) as aggression
- Bullying may lead to internalized anxiety or externalized aggression

Reactions to marginalization

- Social withdrawal
- Rituals
- Denial
 - Seeking adoption in a deviant sub-group
 - Taking on a powerful social identity e.g. 'gay'-dom
- Domineering victim-hood, often with family as target

Coping with a lack of identity

- Fads
- 'Obsessive' relationships
- Lack of identity in many people with ASD
 - Adopting identity wholesale
 - Joining charismatic groups
 - Moving places and work
- Searching for identity
 - 'Transexualism'
 - 'Aspie'
- Identities off the peg
 - Gangster
 - Professor

What can a general psychiatrist do?

- Psychoeducation
- Family support
- Rehabilitation
- Assertive outreach
- Specialist intervention
 - Psychological treatment of anxiety or depression
 - Counselling
 - Social work input

Is AS associated particularly with forensic problems?

- Unanswerable because
- Lack of prosecution
 - Police discretion
 - Victims
- Referral bias in samples
- Underdiagnosis of AS in offender populations
- Offences are labelled 'challenging behaviour' and not crimes
- Stranger crimes go undetected e.g. anonymous letter writers, letter bombers, arson

Analysis of personal series

- Own patient sample: 25 years of weekly clinics for adults with AS
- 30/ 1000 NHS patients in last 10 years of whom 11 had not been prosecuted
- Rate compares with 50-100/ 1000 in general population
- 3%-40% in learning difficulty
- Concern about links between AS and offending however
 - Profiles

Recorded crime by offence (2004-5 British Crime Survey) compared to two personal samples (excludes traffic offences which are rare in AS)

Offence type by proportion committing	All (N=5 562 691)	ASD (N=1100)	
TOTAL VIOLENCE AGAINST THE PERSON	18.6%	52.9%	▲
TOTAL SEXUAL OFFENCES	1.1%	11.8%	▲
TOTAL ROBBERY	1.6%	0.0%	▼
TOTAL VIOLENT CRIME	21.3%	64.7%	▲
TOTAL THEFT AND HANDLING STOLEN GOODS	36.4%	9.8%	▼
TOTAL CRIMINAL DAMAGE	21.3%	25.5%	
TOTAL PROPERTY CRIME	75.0%	27.5%	▼

Problematic aspects of violence in ASD

- Temporally remote from stimulus
- Target may be chosen because vulnerable not because 'justified'
- Lack of inhibitory cut off
- Lack of predictability
- Long period of rumination may lead to explosion
 - Control efforts ineffective once threshold is reached
 - Calls on a person's self-control once past threshold are ineffective as are emotional appeals

Problematic aspects of other offending

- 'Soft targets' e.g. children cause maximum horror/ disgust
- Inability to provide a justificatory account increases negative reaction of others
- Lack of willingness to try to repair damage to others, lack of 'remorse'

What might be the link between ASD and offending?

- None
- Innocent implication of people with AS
- Family factors
 - Incidental
 - Parent has AS
- Increased adversity
 - indirectly associated with burden of living with a person with AS
 - Associated with AS in a parent
- Marginalization by peers
- Co-morbidity
 - Learning difficulty
 - Psychiatric disorder
- A direct link

What motivates aggression in AS?

- Misunderstanding
- Having an impact, any impact
- Revenge or restitution
- Wanting to be accepted even in a deviant group
- Tension relief
 - 'complex anxiety'
 - Catastrophic reaction
- Habitual comfort



The father is walking along thinking "This is my son" 4 year old artist from Art Gallery on OASIS home page

Possible direct links

- Offending that is directly linked to an AS symptom
- Offending linked to a specific AS impairment
- Offending justified by AS beliefs and attitudes

Offending and symptoms

- Unusual interests leading to offence
 - Malignant nostalgia
 - Rare instances of fraud as by-product of computer interests
 - Over-identification with marginalized group and imitation
- Unusual aversion leading to an offence
 - Hitting screaming children
- Rigidity leading to offence
 - Assaults on railway personnel for early departure of trains
- A lack of persuasiveness
 - Particular kind of powerlessness found in atypical AS

Offending and impairment: empathy

- Emotional empathy
 - Contagion
 - Differentiation between me and you
 - Emotional learning of more accurate contagion e.g. in response to new classes of faces or expressions
 - Is probably impaired in all AS

Offending and impairment: sympathy

- Sympathy (imagination, theory of mind, cognitive empathy)
 - Modification of emotional responding, via selective enhancement and suppression ('scope')
 - Development of sympathy/ prosocial behaviour from 2nd. Year of life via social interaction with mother
 - Sympathy can be thought of as a specific disorder of cognitive empathy
 - Linked to language
 - Is specifically impaired in atypical AS?

Evidence for empathy deficit and offending

- Reviews suggest that empathy is not generally associated with likelihood of offending
- May be linked to nature of offending
 - ‘selective lack of empathy’ in sex offenders
- Could selectively effect ‘violence inhibition mechanism’
 - Callous offending
 - Experimentation e..g ground glass in baby’s food, arson, drowning a fellow pupil at school
- Empathy regularly suppressed by higher functions, including beliefs about justification

Socialization in AS, and offending

- Pro-social beliefs and AS
 - Beliefs are idiosyncratically developed in AS
 - Not same support for differentiation between individuals, perhaps because lack of self awareness in AS
 - Loyalty not well developed
 - Van Krevelen “the homesickness of a cat”
 - Poor sense of equivalence or reciprocity
 - Kicking a cousin for teasing his sister
 - Time does not assuage
 - Rumination keeps reprisals on the agenda

Sexual disorders and AS

Problems in

- Sexual desire
- Sexual performance
- Sexual orientation
- Consummation
- Sexual relationships

Relationships

- Not being attractive (more often in heterosexual men)
 - Being empathic
- Being too compliant (more often in women or some homosexual men)
- Not being able to sustain relationship
 - Knowing what someone wants without them saying
 - Anxiety about failing in relationships
 - May find images or masturbation more attractive than actual people
- Unreciprocated attraction
 - Stalking
 - Sexual threatening behaviour
 - Inappropriate sexual touching e.g. of blonde hair
 - May flip into aggression towards sexually attractive others
- Abusive/ inappropriate/intimidating relationships
 - Abduction or false imprisonment

Prostitution

■ Use of prostitutes

- Probably about same as in general population
- Use of prostitutes may be inappropriate leading to exploitation, but may also be an appropriate sexual outlet
- Upsetting to carers who like to consider people with as AS victims, not users

■ Prostitution

- Prevalence of prostitution by people with ASD unknown although many homosexual men with ASD offer themselves recklessly
- Cause of family breakdown

Gender identity disorders

- Lack of identity in many people with ASD
- Asexuality
- 'Transexualism'

Medication

- Antidepressants
 - Good treatment for anxiety
 - Place of SSRIs more uncertain now
 - Still probably first line although note local guidance
- Antipsychotics
 - Atypicals e.g. risperidone may have fewer side effects
 - Little long-term indication
- Naltrexone for self-harm
- Anticonvulsants and lithium
 - Epilepsy
 - Bipolar disorder
 - ?aggression
- Stimulants
 - Co-existing ADHD, but indications unclear in adults
 - Methylphenidate has some abuse potential although probably over-treated
 - Atomoxetine in post-marketing surveillance phase

What can services do?

- Diagnose
- ?diversion into medical setting
- Ensure adequate representation of person with AS, perhaps by 'normalizing' behaviour
- Cognitive training
- Improve risk assessment
- Question socially undemanding nature of secure facilities
- Assertive outreach in after-care
- Counselling
 - Prodrome may not be easy to see, but it will be there

Our research on DSH

- Spring
 - Rumination
World is own ideas
 - Social world is undivided: attack on one is equivalent to attack on another
- Trigger
 - Opportunity for exercising power
 - Lack of representation of social world
 - Particularly common in AS
 - Explosive
 - Shame in DSH
 - Humiliation in Atypical AS?

Summary

- Should not discount 'normal' predictors of violent and sexual offences
 - Violent role model
 - Abuse
 - Disturbed family
- Should not discount understandability
 - Nostalgia
- Empathy
 - not relevant to initiation
 - but may be to inhibition
- Lack of social understanding
 - Limited relevance to offending
 - More relevant to defence from inappropriate sentence
- Sympathy and other prosocial learning may be more relevant
- Malice and payback
 - Malice particularly common in AS/ ADHD overlap group and is linked to marginalization and determination to gain power with indifference to others' suffering
 - Pay back is linked to ruminations and the belief that the victimizers are an undifferentiated group of everyone else

The bottom line?

- Understanding brings compassion and hope