THE PSYCHOLOGICAL CONSEQUENCES OF ABNORMAL PUBERTY

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Lecture outline

- Take home message
- Concluding remarks
  - Important issues in early puberty + case examples
  - Important issues in late puberty + case examples
- Possible mechanism
- What is known
There are three areas of psychosocial consequences

Note: Studies of psychosocial problems include a wider age range of early puberty.

1. Psychosocial symptoms
   – Early puberty – aggressive behaviour, anxiety, social withdrawal, risk taking behaviour
   – Late puberty – anxiety, social withdrawal

2. Psychosexual development
   – Early puberty - unstable relationships, early pregnancy
   – Late puberty - missing developmental stages

3. Cognition: school achievement & IQ
   – Early puberty - higher IQ, greater curiosity, talkative
What causes these problems to occur? There are three explanations for the emergence of adverse outcomes.

1) Biological explanation

The physical and hormonal changes associated with puberty may be heightened in precocious puberty resulting in:

- disproportionate increases in emotional reactions, erratic behaviour and affinity to risk-taking at a time when the child is least able to cope.

- feelings of guilt about their behaviour

This feelings of confusion which may persist into later stages of life.

Ref: Mendle, Turkheimer & Emery Detrimental Psychological Outcomes Associated with Early Pubertal Timing in Adolescent Girls. Dev. Rev. 2007;27(2)
Mendle & Ferrero Detrimental psychological outcomes associated with pubertal timing in adolescent boys 2012;32
Three explanations for the emergence of adverse outcomes.

2) Psychosocial explanation

- In addition to the physical changes the wide-ranging emotional shifts often make life difficult for the child.

- The child is challenged by the environment:
  - Friends behave differently towards them
    - Teasing, Embarrassment, Social isolation
  - Girls seek out older friends and are more susceptible to negative influences from friends

- The social context appears to be critical to the development of psychological problems.
Individuals who grow up under conditions of family stress (e.g., father absence, unstable family environment) experience behavioural and psychological problems which provoke earlier reproductive readiness.

- Also evidence that other psychosocial environments have different outcome effects, e.g., same sex schools
Study conclusions

• Early puberty is a risk factor for increased problem behaviours.
• Negative peer influence is a risk factor for increased problem behaviours.
• Combined early puberty and negative peer influence has a much greater effect.
Conclusions

• Early puberty as a risk factor when combined with
  – low parental nurturance,
  – poor family communication,
  – poor parental knowledge of the child's activities
The psychological consequences of early puberty

• Precocious puberty can result in:
  - Feelings of isolation / withdrawal
  - Weakening peer relationships
  - Problem behaviours
  - Eating disorders and obesity
  - Risk taking behaviour
  - Early sexual activity

• In the long-term this can result in:
  – loss of education and employment opportunities (low-paying jobs)
  – Poor body image seems to persist even after same-age peers have achieved puberty

• Modifiable risk factors to prevent negative outcomes: Early-maturing girls will benefit from increased parental emotional care, communication, and knowledge.
Cases from the west coast of Sweden
Problematic and sexually active behaviour

Name: Romeo
Family: adopted, single parent
Medical: CCP @ 7yrs, high growth velocity
Psychosocial: lost friends, mood swings, aggressive, bullied, plays with older girls, school behaviour problems
Sexual: Inappropriate sexual behaviour with mother
Cognition: smart
Treatment: GnRH agonist
Result: changed schools, mother received social support, reduced aggression

Name: Juliet
Family: single parent, mother ‘burnt out’
Medical: CPP @ 7 yrs, high growth velocity, breast development,
Psychosocial: aggressive in school leading to long absences, mood swings
Sexual: dresses older
Cognition:
Treatment: GnRH agonist
Result: reduced mood swings and aggression, changed schools, mother received support from nurse
Sibling rivalry

Early puberty before a twin sister.

Name: Regan
Family: 2 parents, twin
Medical: CPP 6.5yrs, high growth velocity, breast development
Psychosocial: angry at twin sister, mood swings, nightmares, bullies sister
Sexual: body image concerns, teased by boys
Cognition: quick, curious, good in school
Treatment: GnRH agonist
Result: continues to be treated, reduced aggression, psychological differences to twin sister still exist
Obesity / body image

Puberty is a risk period for the development of eating disorders, problems with weight and body perception issues.

Name: Gertrude
Family: single parent, single child
Medical: obese, CPP @7yrs
Psychosocial: not always careful about personal hygiene, aggressive to mother, school behaviour problems, eating disorder
Sexual: risk due to home situation.
Cognition: curious, control behaviour
Treatment: GnRH agonist
Result: visits a support family, no weight change, changed school
The psychological consequences of late puberty

• Late puberty can result in:
  ▪ Feelings of isolation / withdrawal.
  ▪ Feelings of isolation (more often reported than bullying)
  ▪ Weakening peer relationships,
  ▪ Poor body image
  ▪ Loss of self-esteem
  ▪ Depression
  ▪ Anxious about the future and not fitting in

• In the long-term this can result in:
  – loss of social and developmental opportunities

• Modifiable risk factors:
  – Coping strategies at school and with sports activities,
  – Counselling, reassurance that all is normal. – easier to support the late puberty child
Cases from the west coast of Sweden
Decreased ability to keep up with friends in physical activities and not meeting family expectations

Name: Sampson  
Family: two parents (both late puberty) father had sporting ambitions for child  
Medical: Sports trainer identified problem with puberty, short, stature, thin, late puberty 15yrs  
Psychosocial: low self-esteem, shy,  
Sexual:  
Cognition:  
Treatment: testosterone  
Result: grew muscles, grew taller, discharged

Picture from: http://www.nbcnews.com/id/4556235/ns/health-childrens_health/t/pushing-too-hard-too-young/#.WB4S_HqHPBA
Social problems at school

Name: Beatrice  
Family: two parents, younger brother with late puberty  
Medical: late puberty not identified, investigated at 13yrs, noticed due to younger brother being treated  
Psychosocial: Problem with friends at school, bullied, poor body image, anxious about child bearing possibilities  
Sexual:  
Cognition: high IQ  
Treatment: oestrogen patch  
Result: menarche at 16yrs, discharged
Questions

What are the 3 explanations for the emergence of adverse psychological outcomes of early puberty?

1. Biological, Genetic, Psychosocial

2. Selection, Mechanical, Biological

3. Biological, Psychological, Selection
Which of these symptoms are seen in both early and late puberty?

1. Low self-esteem
2. Negative body image
3. Anxiety
4. All of these
Questions

Which of these symptoms are seen in late puberty?

1. Low self-esteem

2. Decreased ability to keep up with friends in physical activities

3. Teasing/bullying at school

4. All of these
Take Home Message

• Early and delayed puberty can lead to serious consequences which may only be seen later in the child’s development.

• There are multiple ways to explain the causes of these problems.

• There is an additive effect of early puberty and environmental influences (eg. negative friendships / poor communication) which can large consequences.
PENS

• PENS have a vital role to help:
  – the family understand the importance of talking to the child about what they are experiencing and helping them understand.

  – the professional team to understand the issues and problems that the family is experiencing which could affect treatment outcomes.