

Adolescent Health GP Resource Kit

Practice Points

section two - chapter four

Conducting a Physical Examination

Before the Examination see page 51

Young people are extremely self-conscious about their bodies and physical changes. Ensure that any physical examination is done with consent, care and sensitivity:

- ◆ Explain why an examination is necessary
- ◆ Explain the procedures of the examination beforehand
- ◆ Be sensitive to the cultural norms and values of young people from other cultural backgrounds
 - seek approval from parents to conduct examinations – especially if dealing with girls or younger adolescents
- ◆ Seek parental permission where appropriate
- ◆ Offer a chaperone or female support person – especially if you are a male doctor with a female patient
- ◆ Where possible, conduct the examination with the young person partially dressed

Example:

"Kristie, I would like to carry out a physical examination as part of your health assessment. Sometimes people feel a bit embarrassed which is normal. Remember as a doctor this is a routine part of my job. Have you ever had a physical examination before? (If yes – ask what it was like and explore any difficulties). What I'll be doing is (checking your blood pressure, listening to your heart and lungs, feeling your abdomen/tummy etc.). If it would help you to feel more comfortable, you could have another person in the room to support you. How does that sound? Is there anything you'd like to ask me?"

Conducting the Examination see page 51

- ◆ Explain what you are doing in each part of the examination as you go along
- ◆ Provide reassurance of normality – encourage them to ask questions
- ◆ Explain developmental and health matters – take the opportunity to teach them something about their body and how to care for themselves
- ◆ Male doctors especially need to be aware of female patient's feelings of discomfort
- ◆ Pap smears and sexual health examinations can be highly embarrassing – explain clearly your reasons for doing such tests and what is involved

What to Look For *see page 52*

- ◆ Keep in mind some common variations of adolescent development – e.g. unequal breast size in girls; gynaecomastia in boys – *provide reassurance of normality*
- ◆ **Assess growth and pubertal development**
 - Height, weight and calculate Body Mass Index and plot this on a centile chart
- ◆ **Examine skin**
- ◆ **Record blood pressure**
- ◆ **Examine mouth and teeth**
- ◆ **Examine the neck**
- ◆ **Auscultate heart** for murmurs
- ◆ Use '**Tanner Stage**' ratings for measuring pubertal development
- ◆ With young people from **CALD** backgrounds – be aware of health complications due to refugee or migration experiences, e.g.
 - physical deprivation
 - anaemia
 - malnutrition
 - parasitic infections
 - oral health problems
 - post-traumatic stress and other mental health problems

See Appendices for copies of Growth Charts.

Feedback

- ◆ Provide feedback on your findings – be sensitive and straightforward in explaining any negative findings and what these mean
- ◆ Check the adolescent's understanding of your explanation and invite questions
- ◆ Reassure the young person that the changes their body is going through are normal

chapter four

Conducting a Physical Examination

In the general practice setting, a physical examination might be part of a general screening examination in an asymptomatic young person or might be tailored to a specific presentation. This chapter outlines an approach to a 'general physical examination' and discusses pubertal assessment.

The Process

Young people, particularly those going through puberty, are often extremely self-conscious about their bodies and recent physical changes. Part of establishing a relationship of trust with a young person is ensuring that any physical examination is done with consent, care and sensitivity.

- ◆ Explain why an examination is necessary
- ◆ Explain the procedures of the examination beforehand
- ◆ Be sensitive to cultural norms and values for young people and to gender difference. In some cultures it may be uncomfortable or even shameful for a male doctor to examine a female patient
- ◆ Ask if there is anything they are particularly worried about and would like checked

Then:

- ◆ Offer a chaperone – especially if you are a male doctor with a female patient, or
 - arrange for the girl to be examined by a female practitioner where possible
 - and/or to have a female support person present
- ◆ Obtain the young person's consent
- ◆ Seek parental permission where appropriate
- ◆ Protect the young person's modesty and privacy – leave the room for the young person to undress
- ◆ Where possible, conduct the examination with the young person partially dressed
- ◆ Be thorough, gentle and sensitive – respond to the young person's fears and anxiety about being examined:

Example: "Kristie, I would like to carry out a physical examination as part of your health assessment. Sometimes people feel a bit embarrassed which is normal. Remember as a doctor this is a routine part of my job. Have you ever had a physical examination before? (If yes – ask what it was like and explore any difficulties). What I'll be doing is (checking your blood pressure, listening to your heart and lungs, feeling your abdomen/ tummy etc). If it would help you to feel more comfortable, you could have another person in the room to support you. How does that sound? Is there anything you'd like to ask me?"

The Examination

- ◆ Explain what you are doing in each part of the examination (in plain language) as you go along
- ◆ Provide reassurance of normality – encourage them to ask questions
- ◆ Explain developmental and health matters – take the opportunity to teach them something about their body and how to care for themselves
- ◆ Male doctors especially need to be aware of female patients' feelings of discomfort
- ◆ Examination of genitalia or other secondary sex characteristics is not routinely required – unless:
 - there is strong suspicion of an endocrine disorder, or
 - the young person specifically requests it, or
 - you are conducting an examination for certain sexually transmitted diseases such as pelvic inflammatory disease, genital warts or herpes

Note: Breast self-examination and testicular self-examination have not been found to detect early cancers – however the young person can be encouraged to be aware of the normal look and feel of their breasts (young women) and testicles (young men).

- ◆ Pap smears and sexual health examinations can be highly embarrassing – explain clearly your reasons for doing such tests and what is involved

- ◆ Remember that a PAP smear in Australia is not required until a young woman has turned 18 or 2 years after first intercourse whichever is LATER
- ◆ Where possible and appropriate (eg. screening asymptomatic Chlamydia infection in low risk patients) take specimens that do not require a sexual health examination – e.g. first void urine specimens or low vaginal swabs that patients can take themselves for Chlamydia PCR testing

See Chapter 9 – Sexual Health – for more information about a sexual health examination

- ◆ Provide feedback on your findings
 - Be sensitive and straightforward in explaining any negative findings and what these mean
 - Check the young person's understanding of your explanation
- ◆ Document the findings from your examination in the Adolescent Health Check pro-forma, along with the outcomes of your psychosocial assessment, to gain a comprehensive profile of the young person's health status and concerns

See Adolescent Health Check template – Appendix 1

What to Look For:

- ◆ **Assess growth and pubertal development**
 - Height, weight; calculate Body Mass Index and plot this on a centile chart
 - Determine Tanner Staging (see below)
 - Waist circumference
 - Be aware of common variations of adolescent development that can cause the young person significant anxiety– e.g. unequal breast size in girls; gynaecomastia in boys – provide reassurance of normality.
- ◆ **Examine skin** for acne, hirsutism, and other skin conditions such as warts, atopic eczema, seborrhoea, fungal infections and pigmented lesions, especially moles in fair-skinned young people
 - Be aware that stretchmarks may appear during puberty and cause distress
 - Examine piercings and tattoos
- ◆ **Record blood pressure**
- ◆ **Examine mouth and teeth** for caries, gingivitis, tongue piercings
- ◆ **Examine the neck** – thyroid enlargement, lymphadenopathy
- ◆ **Auscultate heart** for murmurs

Screening Investigations in Asymptomatic Young People

- ◆ Chlamydia PCR in sexually active people under 25 years
 - add Gonorrhoea PCR and syphilis EIA for sexually active Aboriginal young people

See Chapter 9 – Sexual Health – for more information

- ◆ Obtain immunisation history
 - offer Hepatitis B vaccine if indicated
 - offer HPV vaccine to young women under 26 years who have not received it as part of the national school vaccination program
 - offer Varicella Zoster vaccine if no history of infection or vaccination.

The Experience Of Puberty¹

- ◆ Puberty involves the most rapid and dramatic physical changes that occur during the entire life-span outside the womb
- ◆ Average duration is about 3 years and there is great variability in time of onset, velocity of change and age of completion
- ◆ Height velocity and weight velocity increase and peak during the growth spurt (early in girls, later in boys)
- ◆ The experience of puberty is to have a changing body that feels out of control
- ◆ Feelings of helplessness are common and may not abate until about 12 months after the growth spurt has ended
- ◆ The typical moodiness, sexual arousal and unpredictable behaviour of the early adolescent are due largely to hormonal changes

Tanner Staging – Measuring Pubertal Development

'Tanner Staging' is a quick, convenient staging system for monitoring physical changes in puberty²

Note: Tanner Staging would not routinely be conducted with the majority of adolescent patients unless you suspect some variation in development

- ◆ Stage 1 is pre-puberty and Stage 5 is full adult physical development
- ◆ Changes to breasts, pubic hair and male genitalia can be staged

- ◆ This system allows objective comparison over time and between health professionals

See Tanner Charts – Appendices

- ◆ Adolescents can also accurately grade their own development from these diagrams – this is useful when the young person is reluctant to be examined

Unless clinically indicated, it is usually not necessary to undress the adolescent. If you have a chart available, most young people will accurately point to the diagram that best matches their Tanner stage.

resources

- ◆ **Tanner Charts** can be obtained from Pfizer Australia – **1800 629 921**
- ◆ Growth charts can also be downloaded from the on-line version of the Kit – see **NSW CAAH website** – www.caah.chw.edu.au

practice points

- ◆ Pubertal (secondary sexual) development before 8 years in girls and 9 years in boys is abnormal and must be assessed by a specialist – there is no place for expectant treatment
- ◆ The most common pubertal disorders seen in clinical practice – which are in fact variants of normal – are mild maturational delay and gynaecomastia in the male – active intervention is rarely required
- ◆ In females, menstrual concerns and signs of possible androgen excess (hirsutism, acne, menstrual irregularity) are common presentations – Polycystic Ovarian Syndrome must be excluded
- ◆ Height growth velocity and final height are linked to developmental and osseous age rather than chronological age – there is no absolute cut off age for further height growth
- ◆ Random or ‘spot’ hormone tests need to be interpreted with caution in puberty, where hormone changes are dynamic and where dynamic testing may be required

Case Study – Puberty

Tom is a 14 year, 2 month old boy who comes to see you because he has not yet commenced puberty. His medical history is completely normal. He has only ever presented to you for routine immunisations and minor illnesses such as sporting sprains and colds. He lives at home with both parents and a younger sister, aged 12, who has started puberty. He is in Year 8 at the local high school and says that all his friends are taller than him, and he feels very self-conscious because he’s the only one with a squeaky voice. On examination he is a Caucasian boy, measuring 147cm (<5th centile) and weighing 37kg (<5th centile). His testes measure 1.5ml (Tanner stage 1) and he has no pubic hair (Tanner stage 1). His physical examination is otherwise normal.

Tom has delayed puberty (absence of any pubertal development by age 14 in boys, 13 in girls). Your assessment should include:

History:

- ◆ Growth record – plotting his height and weight to see whether and when his growth might have deviated
- ◆ Family history – parents’ and siblings’ heights; when parents and other family members started puberty, or went through particular pubertal events (e.g. menarche in mother? when did father start shaving? Was father small compared to friends in high school?) Note: >60% of adolescents with constitutional delayed puberty have a positive family history
- ◆ Systems review – to exclude systemic illness
- ◆ Nutritional history and eating habits – to exclude chronic malnutrition

Physical Examination

- ◆ Height and weight
- ◆ General appearance and nutritional status
- ◆ Sexual Maturity Rating (Tanner stage)
- ◆ Thyroid – evidence of goiter, signs of hypothyroidism
- ◆ Chest – evidence of chronic pulmonary disease
- ◆ Heart – evidence of congenital heart disease
- ◆ Abdomen – evidence of liver or spleen enlargement as a sign of a chronic systemic disorder
- ◆ Neurological examination – especially looking for signs of intracranial pathology (e.g. intracranial hypertension)

Laboratory Investigations

- ◆ FBC – exclude anaemia, leucocytosis
- ◆ ESR – exclude systemic disease
- ◆ Serum biochemistry – electrolytes, creatinine, glucose, calcium, phosphorus, liver function (including albumin, protein)
- ◆ Bone age – this is very useful in conjunction with chronologic age and height/weight
- ◆ Bone age is delayed in constitutional delayed puberty (as well as hypopituitarism, hypothyroidism, chronic illness) but may be normal in Turner's syndrome
- ◆ T4 and TSH
- ◆ Gonadotrophins

Note: 90 – 95 % of delayed puberty is constitutionally delayed puberty, but this is a diagnosis of exclusion. The above serves as a guide only, and other investigations and/or referral to an endocrinologist may be warranted.

Management of Constitutionally Delayed Puberty includes:

- ◆ Explanation and reassurance
- ◆ Follow-up and review – medical and psychosocial, to ensure that puberty does begin, to be certain that any other abnormality was not overlooked, and to review the psychosocial impact of delayed puberty on the adolescent
- ◆ Hormonal intervention is rarely warranted, but could be explored if severe psychological problems arise

resources

- ◆ The Royal Australian College of General Practitioners (2005). *Guidelines for preventive activities in general practice*, 6th edition. RACGP.
- ◆ Strasburger, V., Brown, R., Braverman, P.K., Rogers, P.D., Holland-Hall, C., Coupey, S.M. (2006). *Adolescent Medicine: a handbook for primary care*. Lippincott Williams and Wilkins. USA.

practice points

- ◆ Extreme self-consciousness about one's body is a common and normal aspect of adolescent development
- ◆ Gender and cultural differences and norms must be considered prior to conducting a physical examination
- ◆ Consent should be obtained from the young person before a physical examination is undertaken

References:

- 1 Bennett, D. L. and Kang, M.(2001). Adolescence in Oates, K., Currow, K., and Hu W. *Child Health: a practical manual for general practice*. MacLennan and Petty. Australia.
- 2 Tanner, J.M. and Davis, P.S.W. (1985). Clinical longitudinal standards for height and height velocity for North American children. *Journal of Paediatrics*. 107:317-329.