

Functional (formerly "recurrent") abdominal pain

Abdominal pain is one of the most common presenting complaints in both primary and secondary care. Occurs in 10% of children, with an organic cause found in 5% of these. 30% go on to develop IBS or other chronic symptoms in adulthood. It is a condition comprising both organic and functional disorders and is therefore, in the absence of distinguishing diagnostic tools, clinically challenging to diagnose and manage.



- Waxes and wanes
- Occurs with three episodes within a three-month period of time
- Is severe enough to affect a child's activities (eg. school attendance)

Apley and Naish, 1958

Look for alarm symptoms or signs (involuntary weight loss, deceleration of linear growth, g.i. blood loss, significant vomiting, chronic severe diarrhoea, unexplained fever, persistent right upper or right lower quadrant pain, family history of inflammatory bowel disease) which increase the probability of an organic disorder and justify further diagnostic testing (FBC, CRP, coeliac screen, ESR, urine for MC&S might be a good start. Abdo USS is safe and may be reassuring for the family but rarely illuminating for the doctor. H Pylori is as common in those with chronic abdominal pain as those without). Symptoms may persist for longer in children who have been victims of sexual abuse. Parental understanding of the interplay between emotional and physical health is strongly related to recovery. See the references below for more info:

[BMJ 2007;334:997-1002](http://www.bmj.com/2007/334/997-1002) full text article, clear and comprehensive [Patient.co.uk article](http://www.patient.co.uk/article) as above with some useful further links

http://www.keepkidshealthy.com/welcome/commonproblems/abdominal_pain.html is a sensible, reassuring American patient information leaflet. Did you know popcorn is a good source of fibre?

What is normal puberty?

Archives of Disease in Childhood have published 2 excellent articles this year on disordered puberty ([ADC Educ Pract Ed 2012;97:9-16](http://adc.bmjjournals.com/adc/2012/97/9-16)) and premature adrenarche ([ADC 2012;97:250-254](http://adc.bmjjournals.com/adc/2012/97/250-254)). Dr Amy Rogers has used these and other resources to put together a helpful guide to precocious puberty, see <http://www.paediatricpearls.co.uk/2012/04/disordered-puberty-neatly-explained/>.

Normal puberty in Girls:

First sign of puberty is breast buds (range 8-14 yrs, mean 11 yrs)
Pubic hair follows a few months later, then their growth spurt
Periods usually start about 2 years after breast buds are first noticed
Most girls start their periods by 13 and finish growing by about 15

Normal puberty in Boys:

First sign of puberty is testicular enlargement
After a few months, the penis starts to enlarge and pubic hair develops (range 9-15 yrs, mean 12 yrs)
Growth spurt happens later in boys, usually around 14, final height not reached until 17

RED flags include:

Boys with signs of puberty < 9 yrs old
Girls with breast development and multiple café-au lait patches
Androgen-mediated early signs of puberty (greasy skin, body odour, acne, mood swings, pubic/axillary hair)
Concomitant neurological symptoms
Arrested pubertal development
Abdominal mass +/- prominent breast development in girls with no other signs of puberty

Others to refer:

Girls with no breast buds at 13 or no periods by age 16
Boys with no signs of puberty by 15
Girls with signs of puberty < 8 yrs old

Great endocrine patient information leaflets available from <http://www.bsped.org.uk/patients/index.html>.

Issues around "Growth"

[Measuring children's height](#), weight (and head circumference in the younger children) should be a routine part of their clinical examination.

New UK-WHO growth charts for children 0-4 came out in 2010 and are now in most young children's child health record (red book).

The new charts are based on longitudinal and cross-sectional data from around the world BUT [the inclusion criteria were](#): singleton, healthy, exclusively breastfed for 4 months, weaned from 6/12 and from economically comfortable backgrounds.

The 2010 UK-WHO 0-4 charts therefore describe *optimal* rather than *average* child growth. They are available [here](#). The updated charts for older children are due to be published shortly.

Refer children who are growing along the 0.4th centile at school entry. [Growth hormone in Turner's syndrome](#) or growth hormone deficiency can add cms to a child's final height, if started early enough, and be life changing.

How many times do you get asked "what's that in pounds"? For easy conversions take a look at these:

<http://www.albireo.ch/bodyconverter/table.htm> (height and weight charts)
<http://www.albireo.ch/bodyconverter/index.htm> (point-of-care converter)
<http://www.metric-conversions.org/> has loads of different conversion tables. Takes a bit of working around but quite useful for children's homework too...

Apologies for the joint issue; I blinked and March became April this year before I could get these text boxes properly filled and formatted. Do suggest any topics you want me to try and cover; disordered pubertal development was a GP request for this month. Leave suggestions at <http://www.paediatricpearls.co.uk/2010/09/request-for-comments/> or indeed anywhere on the website – they all come to me for moderation.

Does EZ-IO insertion hurt?

Apparently not... much...

<http://www.youtube.com/watch?feature=endscreen&NR=1&v=uU716y92kgo>

Watch Vidacare's own video if you need a reminder on how to use the intraosseous drill: <http://www.youtube.com/watch?v=GWmzVEqWQYg> and try this if you are still using the manual Cook's needles: <http://www.youtube.com/watch?v=JVbPANbgxQM>

NB: The Advanced Life Support Group advocates using intraosseous access first line in a child in cardiac arrest or second line if intravenous access is not achieved in any other critical situation within 90 seconds of trying.

Can you tell neonatal pustulosis and staph skin infection apart?

Take a look at this fabulous New Zealand neonatal site one of the SHOs found recently when we had a systemically well 5 day old baby with yellow spots in A and E. <http://www.adhb.govt.nz/newborn/teachingresources/dermatology/infectivelesions.htm> has the pictures of staphylococcal pustules which appear after a few days of life and should be treated. Oral flucloxacillin is an option at this age as long as the baby is well and the pustules are not near the umbilicus. The benign lesions, which include benign pustular melanosis of the newborn (usually present at birth), look very similar but need no treatment and are at <http://www.adhb.govt.nz/newborn/teachingresources/dermatology/benignlesions.htm>.