Constipation- more than Movicol ?

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Learning Points

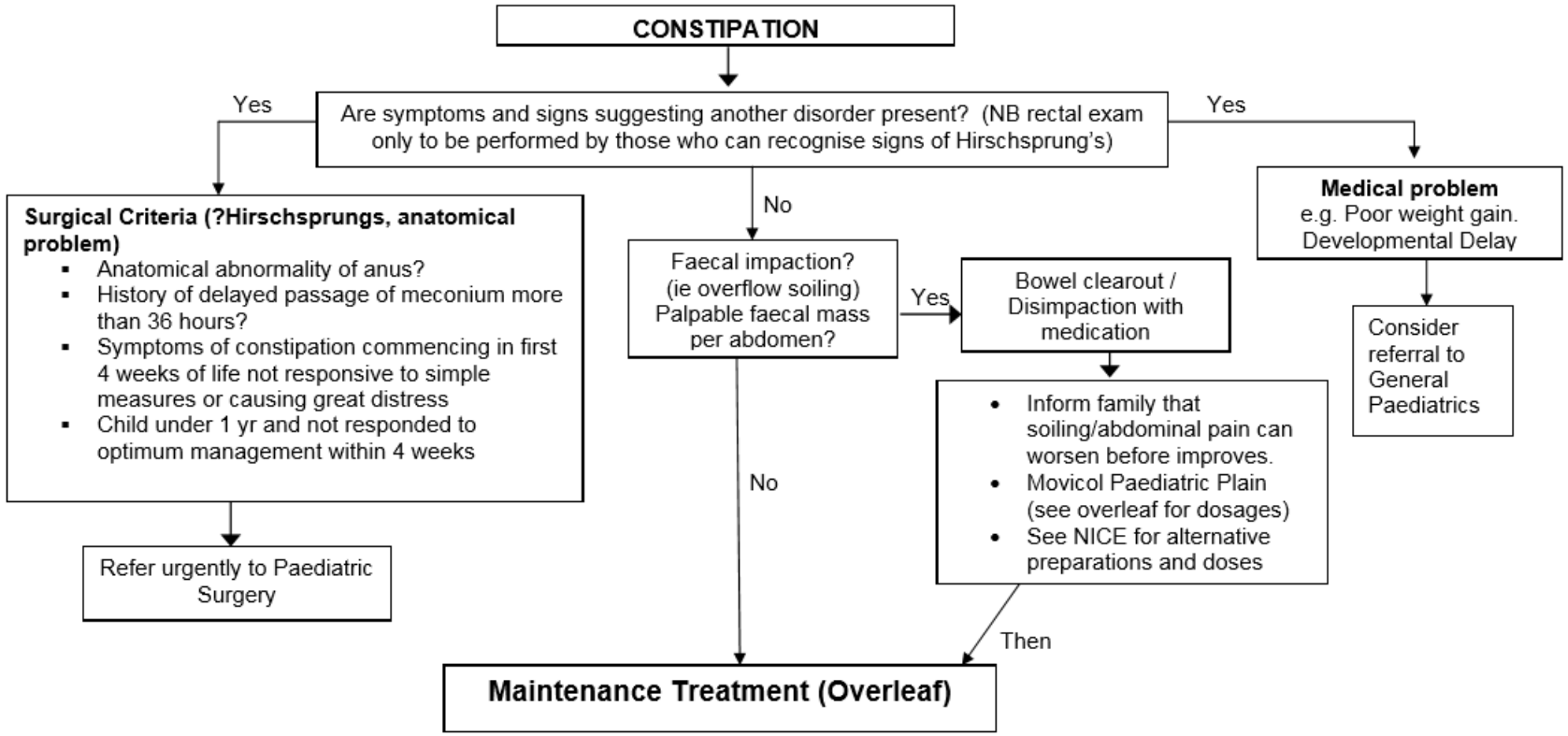
- How to rule out an underlying cause for constipation
- How to diagnose and treat faecal impaction
- How to manage encopresis
- Learn about the many ways in which constipation can present
- How to assess Chronic Abdominal Pain in Children
- How to do a growth assessment in 30 seconds
- Learn about the Role of Specialist Paediatric Continence Nurse

Case 1

- 4 year old boy
- Mum says “always been constipated”
- Bowels open large stool which “ blocks the toilet” every 3 days
- In between gets “liquid” in the underwear
- “Doesn’t seem to notice” – comes home in soiled pants
- GP colleague started movicol but increased soiling so mum has stopped it.

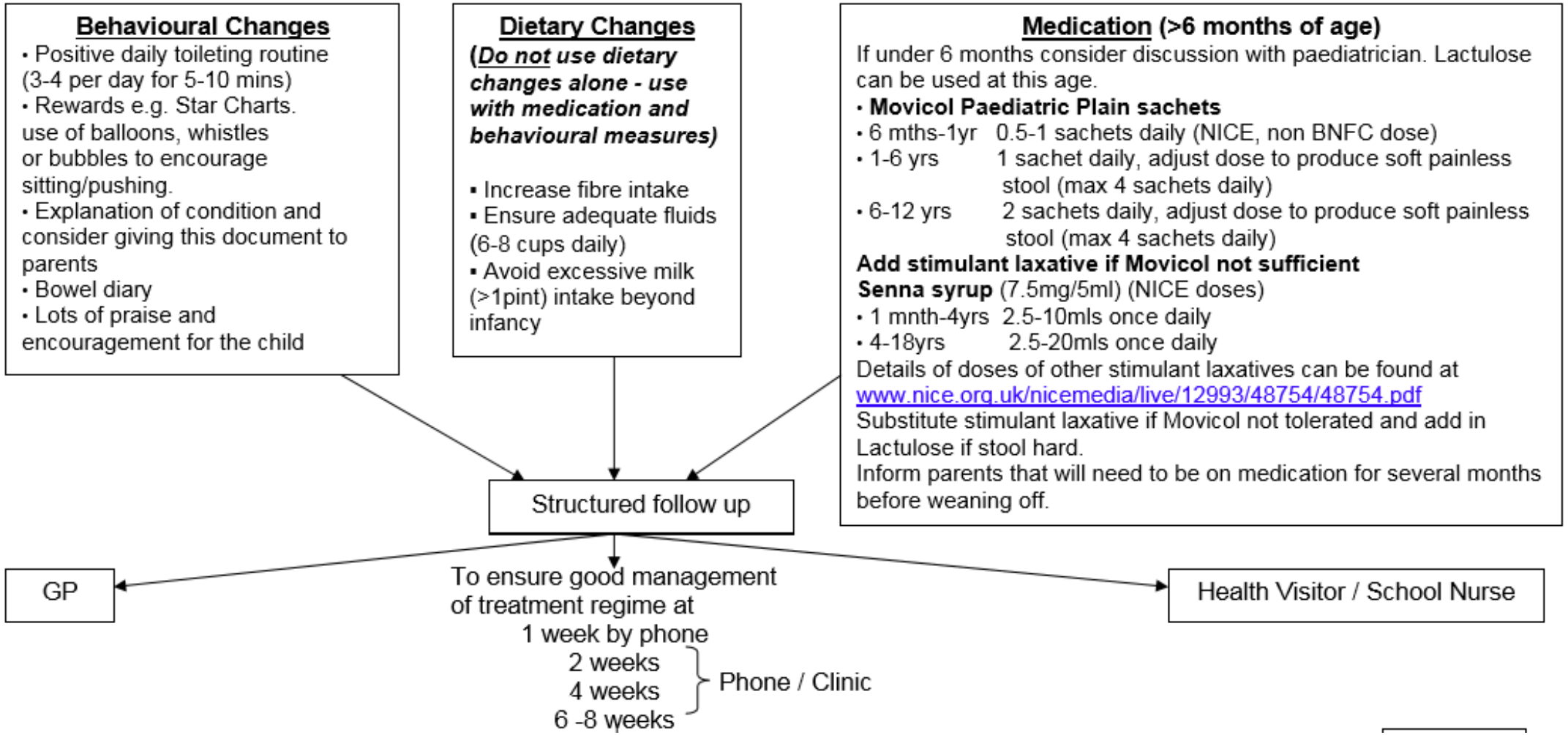
How would you Assess further?

What is the most likely diagnosis and what would be your management ?


CONSTIPATION
Are symptoms and signs suggesting another disorder present? (NB rectal exam only to be performed by those who can recognise signs of Hirschsprung's)
Yes
Yes
No
Surgical Criteria (?Hirschsprungs, anatomical problem)
Anatomical abnormality of anus?
History of delayed passage of meconium more than 36 hours?
Symptoms of constipation commencing in first 4 weeks of life not responsive to simple measures or causing great distress
Child under 1 yr and not responded to optimum management within 4 weeks
Refer urgently to Paediatric Surgery
Faecal impaction? (ie overflow soiling) Palpable faecal mass per abdomen?
Yes
Bowel clearout / Disimpaction with medication
Inform family that soiling/abdominal pain can worsen before improves.
Movicol Paediatric Plain (see overleaf for dosages)
See NICE for alternative preparations and doses
No
Then
Medical problem
e.g. Poor weight gain. Developmental Delay
Consider referral to General Paediatrics
Maintenance Treatment (Overleaf)

Age	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
< 1yr NICE (unlicensed)	0.5 – 1 Sachet	0.5 – 1	0.5 – 1	0.5 – 1	0.5 – 1	0.5 – 1	0.5 – 1
1 - 5yrs (unlicensed)	2 Sachets	4	4	6	6	8	8
5 – 11 yrs	4 Sachets	6	8	10	12	12	12
12 yrs + (Movicol adult)	4	6	8	8	8		

NB **Do not increase once child has had loose watery stools** for approximately 24 hours, but cut back to maintenance regime, often half disimpaction dose


Behavioural Changes
• Positive daily toileting routine (3-4 per day for 5-10 mins)
• Rewards e.g. Star Charts. use of balloons, whistles or bubbles to encourage sitting/pushing.
• Explanation of condition and consider giving this document to parents
• Bowel diary
• Lots of praise and encouragement for the child
Dietary Changes
(Do not use dietary changes alone - use with medication and behavioural measures)
▪ Increase fibre intake
▪ Ensure adequate fluids (6-8 cups daily)
▪ Avoid excessive milk (>1pint) intake beyond infancy
Medication (>6 months of age)
If under 6 months consider discussion with paediatrician. Lactulose can be used at this age.
• Movicol Paediatric Plain sachets
• 6 mths-1yr 0.5-1 sachets daily (NICE, non BNFC dose)
• 1-6 yrs 1 sachet daily, adjust dose to produce soft painless stool (max 4 sachets daily)
• 6-12 yrs 2 sachets daily, adjust dose to produce soft painless stool (max 4 sachets daily)
Add stimulant laxative if Movicol not sufficient
Senna syrup (7.5mg/5ml) (NICE doses)
• 1 mnth-4yrs 2.5-10mls once daily
• 4-18yrs 2.5-20mls once daily
Details of doses of other stimulant laxatives can be found at www.nice.org.uk/nicemedia/live/12993/48754/48754.pdf
Substitute stimulant laxative if Movicol not tolerated and add in Lactulose if stool hard.
Inform parents that will need to be on medication for several months before weaning off.
Structured follow up
GP
To ensure good management of treatment regime at
1 week by phone
2 weeks
4 weeks
6 -8 weeks
Phone / Clinic
Health Visitor / School Nurse

Encopresis and Soiling

In the UK separate definitions are used for encopresis and soiling, in contrast in the USA the term encopresis is used to describe any regular passage of stool into underwear. (The terms non-retentive and retentive encopresis are sometimes used)

- In the UK encopresis is described as the passage of a normal stool in a socially inappropriate or unacceptable place

(Non-retentive encopresis)

- Soiling is described as the involuntary passage of fluid or semisolid stool into underwear (most commonly as a result of overflow from a faecally loaded rectum)

(Retentive encopresis)

Encopresis and Soiling

- Although parents may find it frustrating, soiling is very rarely thought to be caused by a child misbehaving. They usually can't help it and some children may not even realise they've had an accident.
- Children who have this problem may feel ashamed, guilty, frustrated or angry, and may act secretively to try to hide the problem.
- Most children who soil their pants are severely constipated. They may ignore the urge to go to the toilet and "hold on" to avoid the pain of passing stools.
- This leads to faecal impaction – when a large, solid stool becomes stuck in their rectum (back passage) and begins to stretch and weaken the surrounding muscle walls. Watery stools then leak out from around this blockage.

Case 2

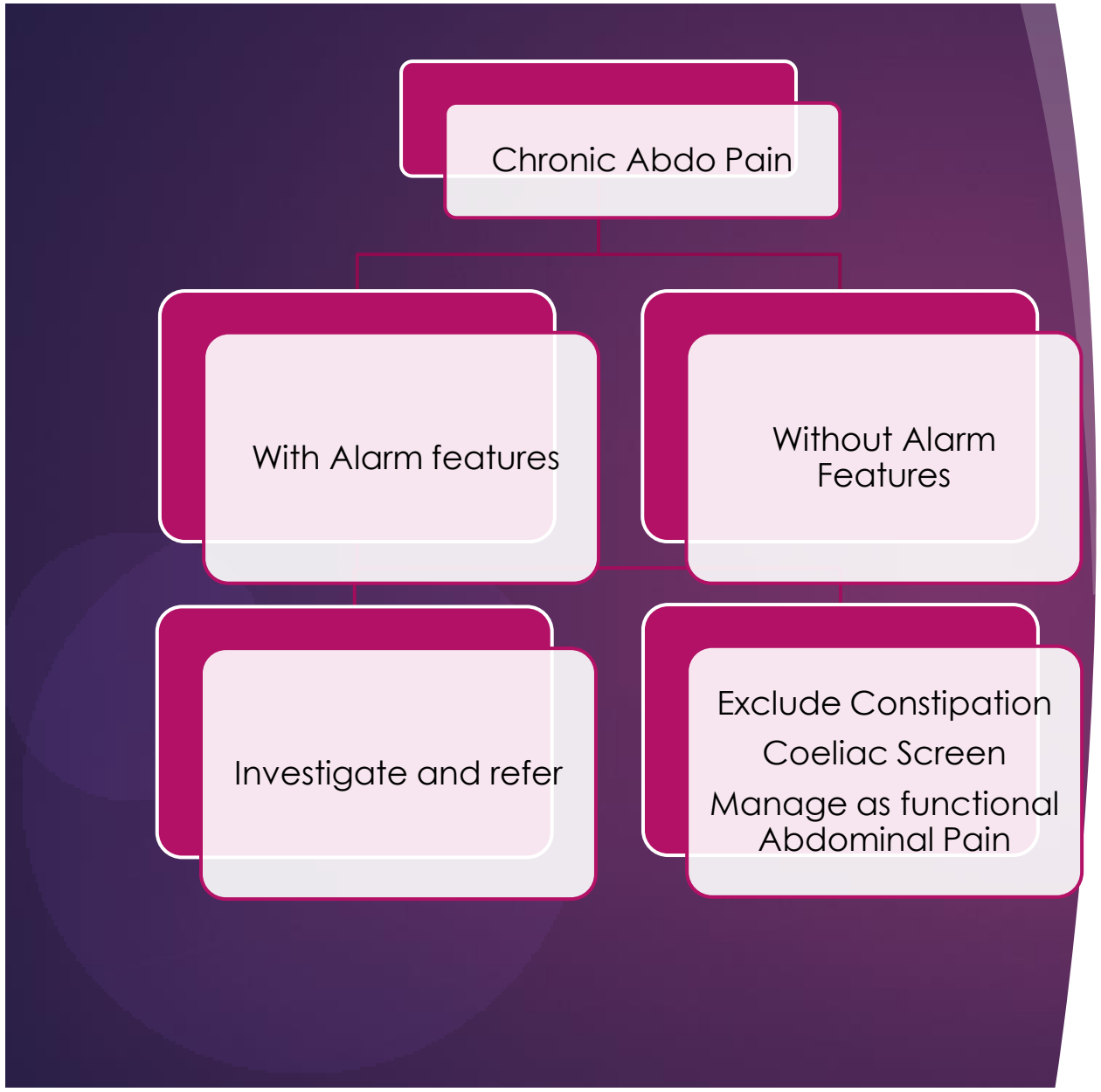
- 6 year old boy
- 1 year history of central and lower abdominal pain
- Pain occurs after eating and lasts for approximately 15minutes
- Active boy- who eats well and is growing normally
- No change in bowel habit
- Initially his symptoms were worse at school and aunties house but now it can occur anywhere
- FBC UE LFT CRP normal
- On examination BMI was 18.3

Presentation of symptoms

- Common things present commonly and common things present uncommonly
- 3 main diagnoses to consider in Chronic Abdominal pain in children
- Stool diary often needed to diagnose constipation
- Growth Assessment essential for chronic abdominal pain
- Affect on daily activities is used to class severity

Which of the following can be a initial presentation of Constipation?

- Abdominal Pain
- Rectal Bleeding
- Rectal Prolapse
- Recurrent UTI's
- Enuresis
- Vulvovaginitis



Chronic abdominal pain:
- Child >3 years old
- ≥3 episodes over ≥3 month period
- Affecting daily activities

Alarm symptoms/signs?
- Involuntary weight loss/failure to thrive
- Gastrointestinal bleeding
- Chronic, persistent diarrhoea or vomiting (some minor vomiting may occur in Functional Abdominal Pain)
- Persistent right upper quadrant or right lower quadrant abdominal pain
- Unexplained fever
- Family history of inflammatory bowel disease (IBD)
- Jaundice
- Urinary symptoms, back or flank pain
- Abnormal examination findings

[History of constipation – manage constipation, Constipation in Children Guideline]

[In pubertal girls, consider pregnancy test & screening for sexually transmitted disease]

Yes

Investigate:

Blood tests (all) – FBC, ESR/PV, Ferritin, CRP, U/E, LFT, glucose, amylase/lipase, Coeliac screen

Urine test (all) – Urinalysis +/- culture if dip test suggests UTI

Ultrasound (selective) – if right upper quadrant pain, right lower quadrant pain, jaundice, urinary symptoms, back/flank pain, weight loss/failure to thrive, abnormal examination

No

Coeliac screen

Functional Abdominal Pain:

Reassurance and education

Focus on resuming normal function rather than on complete resolution of pain

Consider psychological, pharmacological intervention if pain persists (Appendix 2)

Positive

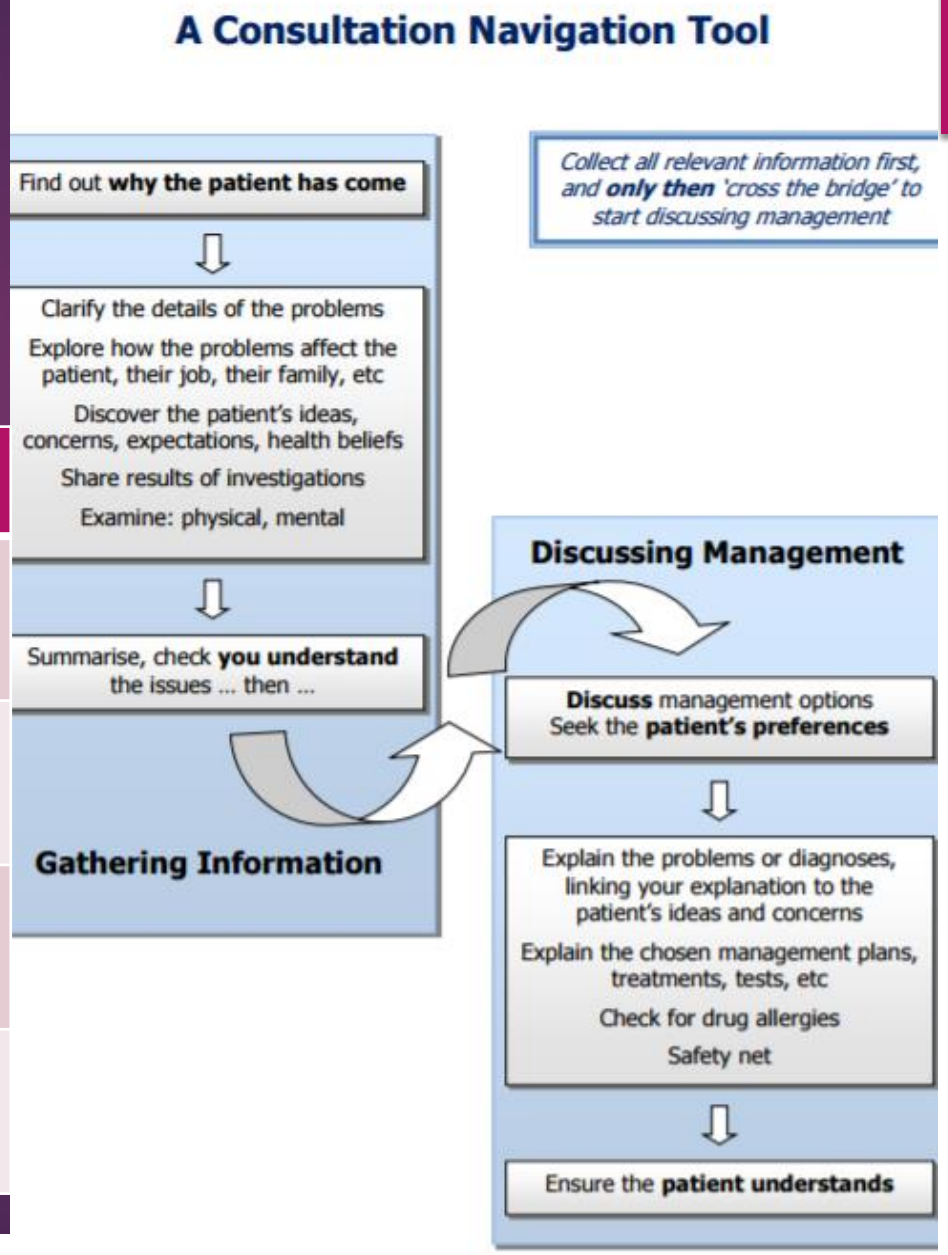
Refer:

Paediatric Gastroenterology (BRHC) if positive coeliac screen or investigations strongly suggestive of IBD (especially if positive family history).

General Paediatrics (BRHC, Southmead, Thornbury, Cossham, South Bristol Community Hospital) if alarm symptoms/signs +/- abnormal test results.

Management of Functional Abdominal pain

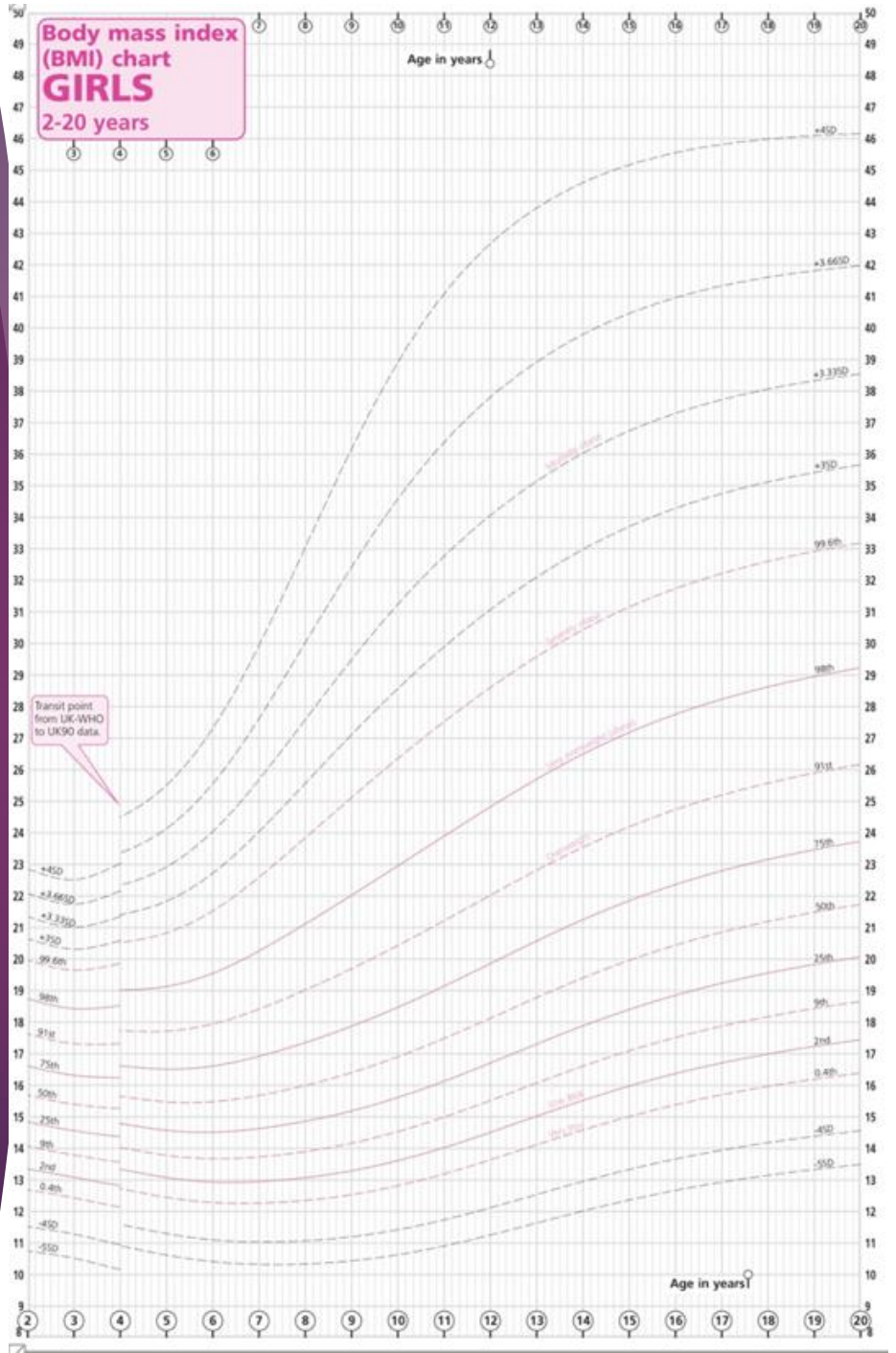
Using Consultation Skills for a Bespoke Management Plan		
Ideas	Might be food allergy	food diary/ short term exclusion Coeliac screen?
Concerns	Physical disease	Explain- common and if no alarm symptoms and growing then unlikely anything serious
Expectation	Extensive investigations	GA needed for endoscopy Blood tests rarely helpful.
Psycho-social Issues	Missing School	Letter to school Stand by medication



5 year old girl with BMI 18

a) Underweight
b) Healthy Weight
c) Overweight

BMI centiles



Weight gain

Average weight (Age +4) x2

Approx 2kg per year mid childhood

Linear Growth Velocity

Mid childhood age 3 to 10
6-7 cm per year

Prepuberty Nadir

5cm per year

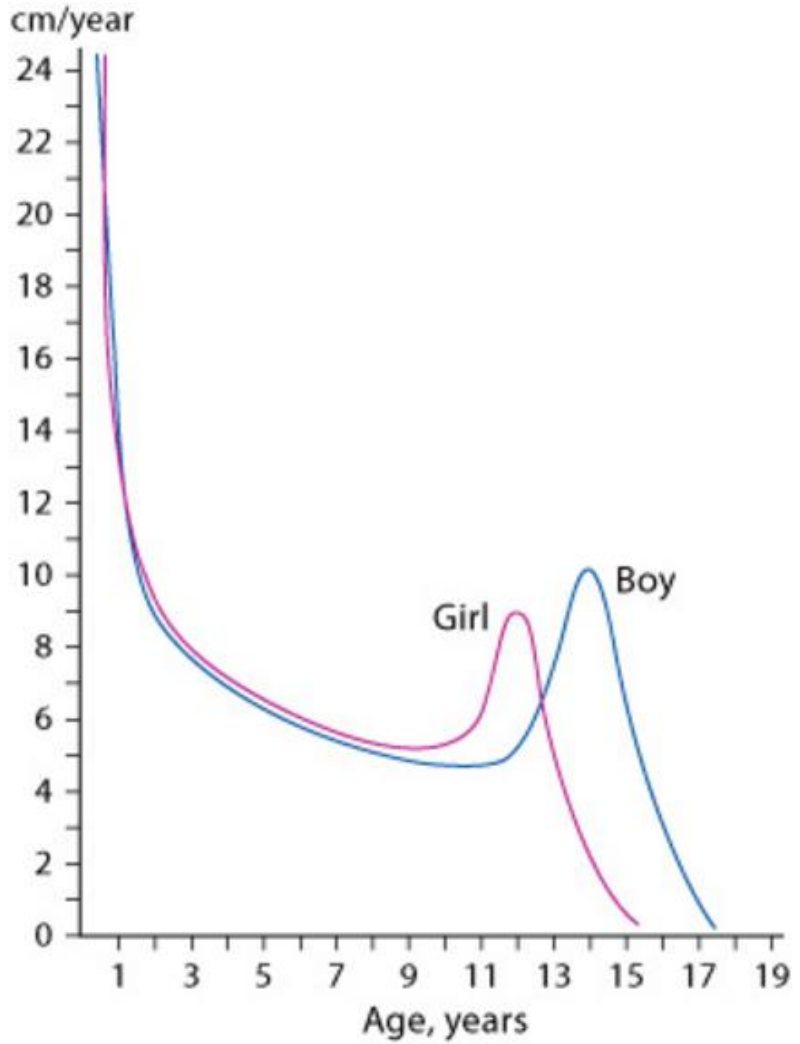


Fig. 2. Linear growth velocity according to age in girls and boys. Modified from Tanner et al. [6, 7]