MANAGEMENT OF CHRONIC CONSTIPATION OF ADULTS WITHIN THE COMMUNITY

OBJECTIVE: To provide guidance based on current best evidence, to aid decision making in the management of CC by health staff in the community.

Exclusions: Children, pregnancy, bowel disease, surgical intervention, neoplasm.

DEFINITION:

Chronic constipation (CC): functional GI disorder onset at least 6 months with 2 or more of following symptoms for at least 3 months: fewer than 3 spontaneious bowel movements/week; any of these for more than 25% of defecations:- *straining; lumpy or hard stools; sensation of incomplete evacuation; sensation of anorectal blockage; manoeuvres to facilitate defecation.* Loose stools rarely present without laxative use. Insufficient criteria for IBS.[1]

CC associated with significantly higher prevalence and incidence of cancer and benign neoplasm. The risks are increased with severity of constipation.[3]

Identifying subtypes of patients with CC will guide subsequent therapeutic choices.[5]

Primary: 3 subtypes: normal transit, slow transit and evacuation disorder.

Secondary: secondary to medications, obstruction, metabolic, neurological, systemic, psychiatric disorders.[7]

GLOSSARY OF TERMS

BFI: subjective assessment of ease of defecation over 7 days[8]
CAS: 8 point assessment of severity of constipation[29]
CSS: Questionnaire indicating severity of constipation[10]
EBSQ: Bowel symptom questionnaire for elderly at home[30]
Functional defecation training: Valsalva manoeuvre (huffing) during defecation[15]
PAC-QoL: well-being assessment over 5 dimensions[11]
PEG: polyethylene glycol (Movicol) solution
Rectal /Trans anal Irrigation: water via catheter/cone into rectum which stimulates urge to defecate[20] (e.g. Peristeen Irrigation Kit)
Toileting posture: sitting with stabilised trunk, leaning forward to create < 90° hip angle. May require foot-stool[15]

INCIDENCE IN THE UK:

10% of the general population[16]
20% of the elderly living at home[16]
80% of the elderly in institutions[42]
Up to 70% of people with MS[9]
Up to 75% of people with spinal cord injury[9]
Up to 24% of people with Parkinsons[9]
56% of people with cerebral palsy[9]

Red Flag symptoms: refer to GP

- Recent onset or worsening of CC (esp. in patients over 50)
- Rectal bleeding and/or blood in stool
- Unintentional weight loss > 4.5kg
- Deficiency of iron with or without anaemia
- Palpable mass (rectal or abdominal)[24]
- Persistence of: abdominal pain/cramping; rectal pain; anorexia; nausea; vomiting; fever[25]

BASELINE ASSESSMENT

To establish severity of constipation and impact on QoL.

- Detailed history of bowel patterns[17,20]
- Stool assessment using Bristol stool chart[19]
- Physical examination[18]
- Diet[17,33] and fluid intake[24,25]
- Medications[4]
- Functional ability[14]
- Environment[17]
- Family and social support[18]
- Well-being e.g. PAC-QoL[11]

Use appropriate standardised constipation assessment tool e.g. CAS[29], CSS[10], BFI[8], EBSQ[30]

OTHER STRATEGIES

The following techniques may be of benefit:

- **Abdominal Massage**: non-invasive approach with no adverse effects reported.[27,28] May be cost effective.[31]
- **Biofeedback**: treatment of choice for dyssyneria. To be considered if other measures have failed.[12,32]
- **Behavioural therapies**[21]
- **Rectal/Trans-anal Irrigation** can improve outcomes in patients with intractable constipation.[9,39]
- **Rectal Digital Stimulation**[18]

LAXATIVES

Positive effects with short term use and if meeting specified indicators for use.

- When other non-pharmacological methods have been tried and are ineffective[25,36]
- Evidence is strongest for use of psyllium, and PEG[25,36,37]
- Prucalopride is effective for women where laxatives fail to provide adequate relief[7,9,13,37]
- No research evidence to support use of stimulant laxatives, lubricants or stool softeners[44]

For adverse effects with long term use see reverse.

MANAGEMENT AND EDUCATION

CC has a variety of identifiable causes and possible mechanisms. It is essential to understand the individual and treat accordingly[9,36]

A multidisciplinary team should follow care pathways to develop an individualised bowel management plan addressing identified problems, with continual documented assessment[18,40]

Education of client and carer is necessary to underpin clinical treatment [9,40].

DIET AND FLUID

A well-balanced diet and full hydration maintain bowel function.[26]

- Low fibre diet is a risk factor[33] Dietary fibre can increase stool frequency in mild to moderate constipation.[43]
- Fibre supplementation is a safe alternative to laxatives for institutionalised elderly.[6] Increase fibre and fluid gradually for best effect.[4]
- Increasing fluid intake has little benefit if fully hydrated.[25]
- Probiotics can improve bowel function.[2]

Fibre:
18 – 32 gm/day titrated according to response[38]

Fluid:
1.5 – 2 litres per day[18] (assuming no cardiac or renal restrictions[34])

EXERCISE

Physical inactivity is a risk factor and should be addressed[33]

Effects of exercise:

- Increased stool propulsion [22]
- Improved defecation [41]

Types of exercise:

- walking & general activity[35]
- cycling[22]
- strength & flexibility programme[41]

OUTCOME MEASURES

Compare recorded data for:

- Stool frequency and consistency
- Standardised constipation assessment scores (e.g. for ease of defecation, pain on defecation, abdominal pain/distention, nausea/vomiting, flatulence)
- Measure of well-being

If no response to above management strategies, refer to Gastroenterology on reverse of document.[4]

TOILETING

Consider:

- Regular toilet habits in response to gastro-colic reflex[14,18]
- Toileting posture[15]
- Adapted toilet seating[18]
- Functional defecation training[15,20]

ECONOMIC BURDEN: Annual laxative bill in UK is £101 million[23]

Laxatives
Types : bulk, stimulant, osmotic, stool softeners[25]
Adverse effects with longterm use: Bloating, Flatulence, abdominal cramps, hypermagnesmia, hypokalemia, melanosis coli[37]

Medication The use of certain drugs may result in constipation and should be reviewed as part of ongoing assessment[16]. These include;
Common: antacids, iron, opioids;
Less common: anticholinergic, antidiarrheal, antihistamines, antiparkinsonian agents, antipsychotics, calcium channel blockers, calcium supplements, diuretics, NSAID, tricyclic antidepressants, sympathomimetics[37]

Referral to Gastroenterology
A diagnosis of subtype of chronic constipation is necessary in order to treat effectively. Diagnostic tests with highest supportive evidence: colonic transit study with radio-opaque markers, anorectal manometry, balloon expulsion test, defecography[25,37]

Management of Dyssynergia / Obstructed defecation
Biofeedback has success rate of 70-81% with longterm benefit[36,37]

LITERATURE SEARCH STRATEGY
Keywords used: constipation combined with activities of daily living, biofeedback, cathartics, diet, education, exercise fluid intake, healthcare costs, incidence, management, massage, medication, outcome measures, psychology,, quality of life, toileting.
Principal databases searched: MEDLINE, AMED, Cochrane
Dates: 1984 – June 2016.

HIERACHY OF EVIDENCE USED:*
1 Strong evidence from at least one systematic review of multiple, well designed, RCTs.
2 Strong evidence from at least one properly designed RCT of appropriate size.
3 Evidence from well designed trials without randomisation single group pre – post, cohort, times series matched case controlled studies.
4 Evidence from well designed, non-experimental studies from more than one centre.
5 Opinions of respected authorities based on clinical evidence, descriptive studies or reports from expert committees.

GRADE OF RECOMMENDATION:
A Consistent level 1 studies.
B Consistent level 2 or 3 studies or extrapolations from level 1 studies
C Level 4 studies or extrapolations from level 2 or 3 studies
D Level 5 evidence or troubling, inconsistent or inconclusive studies (any level)

*Phillips B. et al., Oxford Centre For Evidence Based Medicine, 2001

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