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, neoplasim.

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 spontaneous 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 neoplasim. The risks are increased with severity of constipation.3

Identifying subtypes of patients with CC will guide subsequent therapeutic choices.3 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 days8 CAS: 8 point assessment of severity of constipation29 CSS: Questionnaire indicating severity of constipation10 EBSQ: Bowel symptom questionnaire for elderly at home30 Functional defecation training: Valsala manoeuvre (huffing) during defecation15 PAC-QoL: well-being assessment over 5 dimensions11 PEG: polyethylene glycol (Movicol) solution Rectal /Trans anal irrigation: water via catheter/cone into rectum which stimulates urge to defecate20 (e.g. Peristeen Irrigation Kit) Toileting posture: sitting with stabilised trunk, leaning forward to create < 90° hip angle. May require foot-stool15

INCIDENCE IN THE UK:
10% of the general population16 20% of the elderly living at home16 80% of the elderly in institutions42 Up to 70% of people with MS9 Up to 75% of people with spinal cord injury6 Up to 24% of people with Parkinsons5 56% of people with cerebral palsy8

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; fever25

LAXATIVES Positive effects with short term use and if meeting specified indicators for use. • When other non-pharmacological methods have been tried and are ineffective25,36 • Evidence is strongest for use of psyllium, and PEG25,36,37 • Prucalopride is effective for women where laxatives fail to provide adequate relief7,9,13,37 • No research evidence to support use of stimulant laxatives, lubricants or stool softeners44 For adverse effects with long term use see reverse.

EXERCISE Physical inactivity is a risk factor and should be addressed33 Effects of exercise:
• Increased stool propulsion 22
• Improved defecation 41 Types of exercise:
• walking & general activity35
• cycling22
• strength & flexibility programme41

BASELINE ASSESSMENT
To establish severity of constipation and impact on QoL.
• Detailed history of bowel patterns17,20
• Stool assessment using Bristol stool chart19
• Physical examination18
• Diet17,33 and fluid intake24,25
• Medications4
• Functional ability14
• Environment17
• Family and social support18
• Well-being e.g. PAC-QoL11
Use appropriate standardised constipation assessment tool e.g. CAS29, CSS30, BFI, EBSQ30

MANAGEMENT AND EDUCATION CC has a variety of identifiable causes and possible mechanisms. It is essential to understand the individual and treat accordingly3,26 A multidisciplinary team should follow care pathways to develop an individualised bowel management plan addressing identified problems, with continual documented assessment18,40 Education of client and carer is necessary to underpin clinical treatment9,40.

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/distension, nausea/vomiting, flatulence)43
• Measure of well-being
If no response to above management strategies, refer to Gastroenterology on reverse of document.4

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 therapies21
• Rectal/Trans-anal Irrigation can improve outcomes in patients with intractable constipation.9,39
• Rectal Digital Stimulation18

DIET AND FLUID A well-balanced diet and full hydration maintain bowel function.26
• Low fibre diet is a risk factor33 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.26
• Probiotics can improve bowel function.2

Fibre:
18 – 32 gm/day titrated according to response38
Fluid:
1.5 – 2 litres per day18 (assuming no cardiac or renal restrictions34)

TOILETING Consider:
• Regular toilet habits in response to gastro-coolic reflex14,18
• Toileting posture15
• Adapted toilet seating18
• Functional defecation training15,20
Laxatives
Types: bulk, stimulant, osmotic, stool softeners
Adverse effects with longterm use: bloating, flatulence, abdominal cramps, hypermagnesemia, hypokalemia, melanosis coli

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

Referral to Gastroenterology
A diagnosis of type B 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

Management of DysSynergia / Obstructed defaecation
Biofeedback has success rate of 70-80% with longterm benefit

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, toilonging

Principal databases searched: MEDLINE, AMED, Cochrane


HIERARCHY 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)

REFERENCES