CLiP

15 minute Worksheet

Helping patients with symptoms other than pain

1: Constipation

Introductory level

Produced by
St. Oswald's Hospice
Regent Avenue
Gosforth
Newcastle-upon-Tyne
NE3 1EE

Tel: 0191 285 0063
Fax: 0191 284 8004

This version written and edited by

Claud Regnard Honorary consultant in Palliative Care Medicine at St. Oswald's Hospice

Aim of this worksheet

To learn how to assess and manage constipation

How to use this worksheet

- You can work through this worksheet by yourself, or with a tutor.
- Read the case study below, and then turn to the Work page overleaf.
- Work any way you want. You can start with the exercises on the Work page using your own knowledge. The answers are on the Information page - this is not cheating since you learn as you find the information. Alternatively you may prefer to start by reading the Information page before moving to the exercises on the Work page.
- This CLiP worksheet should take about 15 minutes to complete, but will take longer if you are working with colleagues or in a group. If anything is unclear, discuss it with a colleague.
- If you think any information is wrong or out of date let us know.
- Use the activity on the back page and take this learning into your workplace.

Case study

John is a 54 year old man who had surgery for a carcinoma of the colon. Despite liver metastases he has been managing well. He asks to see you because for the past few weeks he has been 'having trouble with the bowels.'

v24

INFORMATION PAGE: Constipation

Constipation- like palliative care it is about quality, not quantity!

There are many symptoms that suggest constipation:

• infrequent stool • uncomfortable stool • hard stool • small volume • sensation of an incomplete evacuation
• diarrhoea (yes, diarrhoea) • abdominal discomfort • nausea • vomiting • colic • anorexia • rectal bleeding

Whilst all of these give useful information, the best identifiers are the ones underlined above.

eg. daily motion that is hard and uncomfortable = constipation
regular, comfortable motion every 6 days = no constipation

Causes of constipation- think about water!

When you realise that a hard stool is a dry stool, you only have to think of what might cause a stool to lose more water than usual. There are three broad causes:

1. *Dehydration* will cause more water to be absorbed from the small bowel and colon.
2. *Factors causing the stool to stay longer in the colon:* these factors give the colon more time to extract water:
   Endogenous (from within the body) eg. reduced mobility (exercise increases bowel motility), depression, hypothyroidism, spinal damage (tumour, compression, multiple sclerosis), scleroderma, and biochemical abnormalities (high calcium, low potassium).
   Exogenous (from outside the body), eg. Drugs are the commonest: those that reduce secretions into the gut (opioids and antimuscarinic drugs like hyoscine); those that increase 'mixing' movements at the expense of forward movement (opioids); those that reduce all bowel movements (antimuscarininc drugs like hyoscine); those that set hard in the colon (barium); and those that increase water absorption from the gut (opioids).
3. *Factors which reduce the ability of the stool to hold on to water:* reduced dietary fibre

Laxatives

Senna tablets or syrup: senna stimulates the colon when in contact with the lining of the colon. Colic can occur.

Bisacodyl: this is also a contact stimulant but acts on both small and large bowel, as well as the rectum, when given as a suppository. Colic is a risk.

Docusate capsules: docusate is a wetting agent which reduces water loss from the stool and is also a mild contact colonic stimulant. A syrup is available but it has an unpleasant, bitter taste.

Marcrogols (eg. Movicol): when taken with the correct amount of water (exactly 125mls) this produces an isotonic solution which stays in the bowel and is useful for clearing faecal impaction in children. Three problems are a) it is often made up with incorrect volumes of water, b) the large volumes are poorly tolerated in patients with advanced disease, and c) the added volume can be incorrectly documented as fluid intake. There is no evidence that they are better than stimulant laxatives.

Lactulose syrup: an osmotic agent which draws water into the gut and is converted to organic acids that stimulate the colon. High doses (>30mls/day) can cause bloating and dehydration, but is usually well tolerated at lower doses.

Note that:

- The best is a combination of a stimulant (senna or bisacodyl) *plus* a softener (lactulose or docusate), although for opioid-induced constipation a stimulant laxative alone is often sufficient.
- The average dose of stimulant laxative is 2 senna daily, rising to an average of 4 senna daily for those on opioids.
- Some people need the equivalent of up to 6 senna daily, plus a softener.
- Rectal suppositories stimulate the rectum mechanically, but bisacodyl stimulates rectal contractions directly.

Helping the patient: clinical decisions

Ideally, constipation should be prevented- a need to treat constipation suggests a failure in prevention. If constipation is present then follow these clinical decisions and actions:

- **Exclude** -an ileus (a slowing or paralysis of the bowel caused by surgery, drugs or infection)
  -obstruction (a blockage caused by tumour or scarring)
- **Have the faeces been easy and comfortable to pass?**
  - if John's stool is infrequent this may be a normal response to reduced intake and only reassurance is needed
  - if this is diarrhoea, this may be overflow due to severe constipation. A rectal and abdominal examination (and sometimes an abdominal X-ray) may show the presence of hard, constipated stool in the colon and rectum.
- **Ensure privacy:** try to help John get to a toilet, or if bed bound ask John if he would prefer a single room.
- **Is there a treatable cause?** Examples include hypercalcaemia, dehydration, and constipating drugs.
- **Is the rectum or stoma full on examination?**
  - if the faeces are hard encourage fluids, start laxatives and stimulate rectal emptying with a bisacodyl suppository.
  - if the faeces are soft, start a stimulant laxative.
  - if there is no success, consider an enema or, as a last resort, a manual evacuation (under sedation if possible)
- **Is the colon full?**
  - if colic is present, start regular docusate and consider a high arachis oil enema.
  - if colic is absent, start a stimulant laxative (eg. senna) plus a softener (docusate or lactulose).
- **Is the constipation persisting?** Consider using bisacodyl.

A treatment plan

1) Ensure the basics: fibre intake (but not in bowel cancers or ill patients), keep up hydration.
2) Clear the rectum, start a laxative combination. 3) Enema or manual evacuation as a last resort.

"What's constipation?" Easy isn't it?
Think of a definition that is clear to you and the patient

Your definition

Constipation is

What factors might cause constipation?

What is the action of these laxatives?
Join up the laxative to the correct action (the first has been done for you)

Laxative	Action
senna	Hypertonic, osmotic agent (draws water into the stool)
bisacodyl	Contact stimulant acting on colon
macrogols (eg. Movicol)	Contact stimulant acting on small and large bowel
lactulose	Wetting agent (makes stool hold on to water)
docusate	Isotonic, osmotic agent keeping water with stool

What would be your plan for John?

Step 3

Step 2

Step 1

FURTHER ACTIVITY: Constipation

In the next month, and using the definition of 'quality, not quantity', identify how many patients in your care are constipated and what action is taken.

FURTHER READING: Constipation

Papers

Bennett M, Cresswell H. (2003) Factors influencing constipation in advanced cancer patients: a prospective study of opioid dose, dantron dose and physical functioning. *Palliative Medicine.* **17**(5): 418-22.

Fallon MT. Hanks GW. Morphine, constipation and performance status in advanced cancer patients. *Palliative Medicine.* 1999: **13**(2):159-60.

Gibson RJ, Keefe DM. Cancer chemotherapy-induced diarrhoea and constipation: mechanisms of damage and prevention strategies. *Supportive Care in Cancer.* 2006; **14**(9): 890-900.

Goodman M, Low J, Wilkinson S. Constipation management in palliative care: a survey of practices in the United Kingdom. *Journal of Pain and Symptom Management*, 2005; **29**: 238-44.

Kyle G. Constipation and palliative care - where are we now? *International Journal of Palliative Nursing.* 2007; **13**(1): 6-16.

Larkin PJ, Sykes NP, Centeno C, Ellershaw JE *et al* on behalf of the European Consensus Group on Constipation in Palliative Care. The management of constipation in palliative care. *Palliative Medicine*, 2008; **22**: 796-807.

Lagman RL, Walsh D. Are abdominal X-rays useful in palliative medicine? *European Journal of Palliative Care*, 2009; **16**(1): 6-10.

Miles CL, Fellowes D, Goodman ML, Wilkinson S. Laxatives for the management of constipation in palliative care patients. *Cochrane Database of Systematic Reviews.* 2006; **(4)**: CD003448.

North American Society for Pediatric Gastroenterology, Hepatology and Nutrition. Evaluation and treatment of constipation in children: summary of updated recommendations of the North American Society for Pediatric Gastroenterology, Hepatology and Nutrition. *Journal of Pediatric Gastroenterology & Nutrition.* 2006; **43**(3): 405-7.

Sykes N. Constipation and diarrhoea. In: *Oxford Textbook of Palliative Medicine* 4th ed. Hanks G, Cherny NI, Christakis NA, Fallon M, Kaasa S, Portenoy RK. eds. Oxford : Oxford University Press, 2010, p833-50.

Twycross RG, Harcourt JMV. The use of laxatives at a palliative care centre. *Palliative Medicine*, 1991; **5**: 27-33.

Xing JH. Soffer EE. Adverse effects of laxatives. *Diseases of the Colon & Rectum.* 2001: **44**(8):1201-9.

Resource books and websites

A Guide to Symptom Relief in Palliative Care, 6th ed. Regnard C, Dean M. Oxford: Radcliffe Medical Press, 2010

Oxford Textbook of Palliative Medicine 4th ed. Hanks G, Cherny NI, Christakis NA, Fallon M, Kaasa S, Portenoy RK. eds. Oxford : Oxford University Press, 2010.

PCF6- Palliative Care Formulary, 6th ed. Twycross RG, Wilcock A, Howard P. www.palliativedrugs.com

Symptom Management in Advanced Cancer, 4th edition. Twycross RG, Wilcock A, Stark-Toller C. Oxford: Radcliffe Press, 2009