MidCentral District Health Board
Te Pae Hauora o Ruahine o Tararua

Phone (06) 350 8061
Fax (06) 355 0616

Postal Address:
PO Box 2056
Palmerston North Central
Palmerston North 4440
New Zealand

Physical Address:
Gate 2
Heretaunga Street
Palmerston North
New Zealand

10 February 2022

Andrew McGregor

E-mail: fyi-request-17690-28706637@requests.fyi.org.nz

Dear Andrew

Official Information Act (OIA) Request

As you are aware, your consolidated OIA requests of 24 November 2021 were transferred to District Health Boards by the Ministry of Health under section 14(b)(ii) of the Official Information Act.

The following information is provided as it pertains to MidCentral District Health Board (MDHB).

- **What are the guidelines/procedures for patients repeatedly admitted to Emergency Department with severe epigastric pain/and upper right and left quadrant pain?**

  The Emergency Department generally does not have specific guidelines based on presenting complaint or diagnosis. Each patient is approached as an individual based on their presenting complaint, past medical history, findings on exam and investigations, and risk factors.

  As an individual department, the Emergency Department does have an Acute Back Pain guideline. A copy of this document (MDHB-6712: **Guideline – Acute Back Pain In Emergency Dept**) is attached.

- **What are the official guidelines/procedures for urgent x-rays (24 hour)?**

  The attached document (MI-0483: **Policy – Patient Priority**) is the guideline used for prioritising urgent x-rays at MDHB.

- **Guidelines/procedures for investigating possible Colonic Motility Dysfunction/Defecatory Disorders/Anorectal Dysfunction.**

  MDHB uses Hospital HealthPathways MidCentral guidelines, copies of which are attached.

  - Inflammatory Bowel Disease (IBD)
  - Constipation in Adults
  - Acute Pain in Adults

Please note that this response, or an edited version of this response, may be published on the MidCentral DHB website 10 working days after your receipt of this response.

Yours sincerely

Lyn Horgan
Operations Executive
Acute & Elective Specialist Services

Encl

GUIDELINE

ACUTE BACK PAIN IN EMERGENCY DEPT	
Applicable to: **Emergency Department**	Issued by: **Emergency Department**
	Contact: **Chris Underwood– ED Consultant**

1. PURPOSE

1. To promote consistent and effective assessment and management of Acute Back Pain.
2. Use a Risk Assessment approach for early identification of those patients with risk factors for serious pathology in whom further investigation is warranted.
3. Enhance the clarity of documentation of back pain presentations.

2. SCOPE

For use in the Emergency Department assessment of presentation with Acute Back Pain.

3. GUIDELINE

Pathways are guidelines and must be in conjunction with sound clinical judgement.
This guideline has been designed through the combined efforts and endorsements of the departments of Emergency Medicine and Orthopaedics.

Context

Back pain is a common presenting symptom in Emergency Departments worldwide.
>80% of the population experiences back pain at some point.
Most commonly, the cause is mechanical rather than serious pathology.
However, a wide differential diagnostic list exists.

Some potential diagnoses are more serious than others, and may require urgent, specific, inpatient management to prevent poor outcomes.

eg infective spinal causes
cauda equina
fractures
AAA
Malignancy

Risk assessment helps to identify patients with risk factors that increase the likelihood of serious pathology being present, in whom further investigation is warranted.

Risk Assessment

Red Flags	D	Drug use, IVDU
	R	Rest pain, pain worse at night or lying down
	A	Age > 65
	S	Steroid use, especially long term, or immunosuppressant use
	T	Trauma of significance (fall >patient height, MVA >low speed)
	I	Infection in recent days
	C	Cancer
	W	Weight loss, especially unintentional
	O	Osteoporosis
	F	Fever or raised inflamm markers, especially unexplained.

Intractable Pain – either severe unremitting pain, or pain persisting > 6 weeks.

Neurology – LL weakness, bladder or bowel dysfunction (incontinence or retention)

ALL patients with Red Flags or Intractable Pain or Neurology should be discussed with the ED Consultant with a view to further investigation including CT or MRI.

Examination Documentation

Must ensure clear, serial documentation of the following.

Observations, gait style and capacity, spinal tenderness, straight leg raise
Lower limb sensation, power and reflexes.
Perianal sensation and anal tone
Abdominal examination

Investigations

Baseline investigation in ALL patients presenting with Acute Back Pain

Obs full set
Bloods FBC, CRP, Ca, ALP
Urine urinalysis +/- culture
Plain films of spinal region of interest, including CXR if thoracic spine.

Indications for CT – after D/W ED Consultant

Bony abnormality on plain films
Significant trauma
Where bone pathology is suspected as the cause of symptoms.

Indications for MRI – after D/W ED Consultant

Patients with Red Flags, Intractable Pain or Neurological Deficits.
Where spinal infection or cauda equina is suspected as the cause of symptoms

Management

Supportive

Analgesia
a. Simple- paracetamol, NSAID, codeine
b. Opiate–early PO/IV morphine to help quickly reduce pain score
c. Pain modulation in D/W ED Senior eg gabapentin, amitriptyline

Specific

According to the primary diagnosis found on assessment.
Positive CT or MRI findings must be discussed with ED Consultant, then consultation with appropriate inpatient team.

Disposition

Most presentations with Acute Back Pain can be successfully treated and discharged home. Must ensure that any cases with Red Flags, Intractable Pain or Neurological Deficits are discussed with an ED Consultant prior to making this decision.

Patients in whom serious pathology is identified as the cause of symptoms should be discussed with the appropriate inpatient team after discussion with ED Consultant.

Patients without serious pathology, but in whom ongoing pain or inability to mobilise despite adequate analgesia, time to allow symptoms to settle, and assessment by physiotherapy, prevents their safe discharge should be referred to the orthopaedic team for consideration of admission.

Advise patient to return urgently to ED if develops symptoms of acute LL weakness, or bladder or bowel dysfunction. Ensure adequate follow up – usually GP initially.

All representing cases of Acute Back Pain should be discussed with the ED Consultant.

4. KEYWORDS

Back pain

MidCentral District Health Board
Te Pae Hauora o Ruahine o Tararua

POLICY

PATIENT PRIORITY	
Applicable to: Medical Imaging	Issued by: Medical Imaging
	Contact: Manager, Medical Imaging

1.0 PURPOSE

To provide a guide for prioritising patients x-ray examinations when there is insufficient Medical Imaging staff and equipment to cover all referring requests.

2.0 SCOPE

All technical staff in the Medical Imaging Department.

3.0 ROLES & RESPONSIBILITIES

All technical staff to adhere to the policy set out below.

4.0 POLICY

Communication with all referrers must occur immediately when a conflicting situation has occurred. If there is conflict between examination times or insufficient staff or equipment, the order in which examinations are carried out should be determined by the clinical judgment of referring clinicians. The MIT(s) involved must assess the situation; seek alternatives such as timing of examinations or timing of staff starting shifts/call. Once all the options have been explored, they should liaise with the referring medical staff who will make the final decision as to patient priority.

Communication with all referrers must occur immediately when a conflicting situation has occurred.

No staff MIT shall cancel any cases. This must be done by the Manager, Grade MITs, Clinical Co-ordinator (NM), or Radiologist.

The priority is as follows:

1 **ED Resus, NNU**
If calls come at the same time or are close, ask the second consultant / referring doctor to liaise with the first and be guided by them.

2 **Theatre, ED and ICU**
Same principle as above -Consult and be guided

3 **CCU and MCH Inpatients**

4 **MCH Outpatients**

5 **GP patients**, with non acute conditions, will be attended to if sufficient staff and resources are available.

NOTE FOR ED ORDER ENTRY VIA CP
Examine patients as they entered onto the ordered work list
UNLESS
Emergency Department notify directly by phone or in person.

During the day:

- Ensure you manage the Orthopaedic workflow so ED patients are not delayed.
- Ensure the GP and ambulatory care clinic patients are alternated so each group do not wait too long and clinic times are met.

5.0 DEFINITION

MIT: Medical Imaging Technologist
NNU: Neo Natal Unit
ED: Emergency Department
ICU: Intensive Care Unit
CCU: Coronary Care Unit

6.0 RELATED DOCUMENTS

MI0463 – CT contingency plan
MI0465 – DSA contingency plan
MI 0215 – Business Continuity plan

7.0 KEYWORDS

Patient, Communication, Priority, Clinical decision.

Hospital HealthPathways MidCentral

Inflammatory Bowel Disease (IBD)

Caution: This page is in development. STYLE-ALIGNED DRAFT PHASE Second

region's changes
Streamliners' changes
queries

Red flags

- Fever
- Tachycardia
- Hypotension
- Abdominal pain
- Diarrhoea
- Rectal bleeding

Background

About inflammatory bowel disease (IBD)

About inflammatory bowel disease (IBD)

Inflammatory bowel disease (IBD) includes Crohn's disease (CD), ulcerative colitis (UC), and indeterminate colitis (IC). All are characterised by inflammation of the gut mucosa with diarrhoea, rectal bleeding, abdominal pain, and weight loss. The location and type of inflammation distinguishes CD from UC:

- UC affects the colon only with continuous mucosal inflammation extending proximally from the anus.
- CD can affect the terminal ileum and/or colon with transmural inflammation and is often discontinuous.
- IC or IBD-U (IBD-type unspecified) is when the bowel is inflamed but there are no features to definitively diagnose UC or CD.

Peak incidence is between 15 and 35 years but may occur at any age.

Diagnosis is made by colonoscopy and biopsy, with further radiological investigations as required.

Assessment

1. Consider either inflammatory bowel disease or colorectal cancer if:
   - persistent (e.g. 3 weeks) diarrhoea with urgency, rectal bleeding, abdominal pain, and weight loss > 4.5 kg.
   - nocturnal symptoms such as diarrhoea or abdominal pain are waking the patient. Functional diarrhoea e.g., irritable bowel syndrome, usually stops at night.
2. Take a history:
   - Family history of IBD, colorectal cancer, coeliac disease, autoimmune disease
   - Drugs, especially NSAIDs (e.g., NSAID enteropathy), antibiotics, laxatives
   - ✓ Smoking

     Smoking

     Check the timing relative to IBD symptoms, as there is a paradoxical relationship between smoking and IBD:

     - Smoking increases the risk of developing Crohn's disease.
     - Smoking reduces the risk of ulcerative colitis. Smoking cessation can precipitate ulcerative colitis.
   - Travel history
   - ✓ Extra-intestinal manifestations of IBD

     Extra-intestinal manifestations of IBD

     - Skin, e.g. erythema nodosum, pyoderma gangrenosum
     - Arthritis
     - Eye, e.g. episcleritis, iritis
     - Mouth ulcers
     - Night sweats
     - Primary sclerosing cholangitis
3. Examination:
   - Check temperature, pulse, and blood pressure.
   - Examine the abdomen.
   - Examine the rectum for PR bleeding or perianal disease e.g., abscesses, fistula, or fissures.
4. Arrange ✓ initial investigations .

Initial investigations

- CBC, CRP, LFT, electrolytes
- Coeliac markers
- Faecal culture, including ova/parasites
- *Clostridium difficile* (*C. diff*) toxin
- Faecal calprotectin

Management

First presentation

1. If acutely unwell, arrange acute gastroenterology assessment.
2. Otherwise, review once blood results are back.

Blood results

- If blood results show anaemia, leucocytosis, thrombocytosis or increased CRP, this suggests IBD:
  - Request specialised assessment, as below.
  - It is not necessary to arrange a faecal calprotectin.
- If the investigations above are normal and there is still a clinical suspicion of IBD, a faecal calprotectin can be done. A negative faecal calprotectin, i.e. less than 50 micrograms/L makes IBD extremely unlikely.

3. Arrange a colonoscopy, noting the likelihood of IBD on the form.

Colonoscopy

Send the yellow internal referral form (MDHB-3101) to the gastroenterology department, requesting a colonoscopy.

4. Consider starting the patient on either of the following medications:
   - aminosalicylates (ASA).
   - other treatments e.g., steroids.

Ongoing management

Ongoing management is usually in association with a gastroenterologist. However, it depends on the severity of the IBD and medications used.

1. Review medications:
   - Check compliance, side-effects, and drug monitoring.
   - See IBD Medications for specific information.
2. If the patient is a young woman:
   - discuss ✓ contraception .

> **Contraception**
>
> - Combined oral contraceptive pill (COC) absorption may be reduced if there is small bowel involvement in Crohn disease.
> - Large bowel involvement does not affect absorption.
> - Do not use COC in patients prone to severe hospitalised exacerbations, as their risk of venous thromboembolism (VTE) is increased.
> - IBD increases the risk of osteoporosis, and the effect of Depo-Provera on bone density may be additive. Alternative, progestogen-only contraceptives that do not affect bone density may therefore be better.
> - For more information on contraception in IBD see Table 3, page 7 in Sexual and Reproductive Health for Individuals with Inflammatory Bowel Disease .

   - discuss ✓ medication risks and benefits in pregnancy and while breastfeeding.

> **Medication risks and benefits**
>
> - It is safe to continue aminosalicylates (ASA) in pregnancy and breastfeeding.
> - Steroids may be associated with cleft palate in first trimester but should be used if required to control disease. Discuss with a gastroenterologist if unsure.
> - Thiopurines, e.g. azathioprine (AZA), 6 mercaptopurine (6 MP), are used in pregnancy.
>   - Local gastroenterology specialist advice is that mercaptopurine is widely used in pregnancy.
>   - For risks in pregnancy and breastfeeding, see NZF mercaptopurine and NZF azathioprine.
> - Biologics – no significant abnormalities to date.
>   - May need to stop at 32 weeks as they cross the placenta.
>   - Specialist input required.
>   - No live vaccines for babies for the first 6 months.

When a pregnancy is confirmed, request a gastroenterology assessment. The gastroenterologist may arrange a further specialist obstetric assessment for women with active

disease.

3. Address lifestyle management:
    - Recommend smoking cessation. Smoking significantly worsens the course of Crohn's disease.
    - Check bone density as there is a risk of osteoporosis due to repeated courses of prednisone, or low vitamin D levels.
    - Check for immunosuppression (increased by use of immunomodulators and biologics, and long-term steroid use, especially if on more than one medication) as it increases the risk of opportunistic infections such as varicella. Encourage early presentation if the patient is unwell.

> **Risk of opportunistic infections**
>
> - Possibility of varicella due to immunosuppression (increased by immunomodulators, long-term steroids, and biologics, especially if on more than 1 medication).
> - Encourage early presentation if unwell.

    - Be aware that depression is more frequent in IBD, affecting confidence and self-image.
    - Educate the patient about nutrition specific to IBD.

> **Nutrition**
>
> In active Crohn's disease, malnutrition with weight loss, protein deficiency, and specific deficiencies in vitamins, minerals, and trace elements are common. Patients in clinical remission are more likely to be malnourished than healthy patients. Malnutrition can coexist with obesity. [1] Malnutrition has a negative impact on clinical course, rate of postoperative complications, and mortality.
>
> - Encourage a healthy balanced diet. Diet may be helpful in reducing symptoms and lessening the effects of IBD complications. [1]
> - Consider and treat any nutritional deficiencies e.g., iron, vitamin B_{12}, vitamin D. Less common are vitamin K, zinc, and folate deficiencies.
> - If the patient has active Crohn's disease and is on a high fibre diet, consider reducing fibre intake.
> - If coexisting functional gut symptoms, consider low FODMAP diet.
> - If the patient has unintentional weight loss or nutrient deficiencies, consider dietitian services.

    - Check for extra-intestinal manifestations of IBD.

Flare-ups

In ulcerative colitis and Crohn's disease, long-term use or recurrent courses of prednisone is not appropriate. Request non-acute gastroenterology assessment for steroid-sparing treatments.

1. If acutely unwell , arrange acute gastroenterology assessment.

> **Acutely unwell** [2]
>
> The criteria for an acutely unwell patient with ulcerative colitis includes:
>
> - More than 6 bloody bowel motions per day, plus
> - One or more of the following:
>   - Temperature > 37.8°C
>   - Heart rate > 90
>   - Hb < 105
>   - CRP > 30

   - Look for red flags.
   - Specialised gastroenterology advice is available.
2. Investigations:
   - Faecal culture and *Clostridium difficile* (*C. diff*) toxin. Relapses are often associated with pathogens or due to *C. diff* after antibiotics.
   - Blood tests – CBC, CRP, LFT, electrolytes.
3. In ulcerative colitis, optimise 5-Aminosalicylate (5-ASA):
   - Increase oral 5-ASA, e.g. Pentasa 4 g per day which can be taken as a once daily dose.
   - Start rectal 5-ASA, e.g. Pentasa enemas if left-sided disease. Can be difficult to hold but encourage patient to persist.
   - Use suppositories for proctitis.
   - If on maximal 5-ASA or limited response after one week, start prednisone and request non-acute gastroenterology assessment to consider starting an immunomodulator or changing the current medications.

> **Steroids**
>
> For example, NZF prednisone
>
> **Indications**
>
> - Steroids can be used to obtain remission either initially for more severe disease or in flare-ups for both ulcerative colitis (UC) and Crohn's disease (CD).
> - Give prednisone for a long enough course, usually 8 weeks and slowly reduce, otherwise an early relapse can occur.

- Consider using topical treatment, such as NZF hydrocortisone acetate (Colifoam/Cortifoam) and NZF hydrocortisone acetate + pramoxine hydrochloride (Proctofoam) enemas in those with proctitis (inflammation in the rectum).
- Note that steroids have no role in maintenance therapy.
- Consider the adverse effects of steroids and an increased risk of infection.

Dose

- Use prednisone at full dose, e.g. 40 mg per day, and wean over about 8 weeks reducing by 5 mg per week.
- Offer bone protection with calcitriol (0.5 micrograms daily) and calcium carbonate (depending on dietary calcium intake) at the same time as the steroid course.
- Consider budesonide in those where prednisone use is contraindicated or previously poorly tolerated. Seek gastroenterology advice.
- For all patients with recurrent courses of steroids or longer courses, request a non-acute gastroenterology assessment for consideration of immunomodulator or biologic.

4. In Crohn's disease, start prednisone and request non-acute gastroenterology assessment to consider starting an immunomodulator or biologic, or changing the current medications.

Biologic

- Biologics or tumour necrosis factor (TNF) blockers have potent anti-inflammatory effects.
- Only two are currently available in New Zealand, NZF infliximab (Remicade) and NZF adalimumab (Humira).

Immunomodulators

Two groups:

- Thiopurines e.g., NZF azathioprine, NZF mercaptopurine (6MP) and NZF thioguanine
- NZF Methotrexate (second-line), oral or subcutaneous

This content is used in other pages on this site – ask your writer for details.

5. If unsure about the best medication to use, seek gastroenterology advice. It may be more appropriate to arrange an urgent gastroenterology assessment, especially if a patient is already on an immunomodulator or biologic.

Request

- If any red flags, request acute gastroenterology assessment.
- Seek gastroenterology advice about first presentation, flare-ups, or medication issues.
- Request non-acute gastroenterology assessment if:
  - first presentation of inflammatory bowel disease is highly likely (i.e., patient has symptoms and suspicious blood results, or positive faecal calprotectin) or diagnosis by colonoscopy.
  - flare-ups, especially if steroids are used.
  - medication problems.
  - pregnancy is planned or has been confirmed.
- If the patient has unintentional weight loss or nutrient deficiencies, consider dietitian services.

Information

For health professionals

Further information

- Faculty of Sexual & Reproductive Healthcare Clinical Guidance:
  - Sexual and Reproductive Health for Individuals with Inflammatory Bowel Disease .
  - Drug Interactions with Hormonal Contraception .
- Gastroenterological Society of Australia (GESA):
  - Inflammatory Bowel Disease: Updated 2018
  - Inflammatory Bowel Disease in Pregnancy Fact Sheets:
    - GP and Obstetrician Fact Sheet
    - IBD Medication Fact Sheet

For patients

- HealthInfo – Inflammatory Bowel Disease
- Crohn's & Colitis New Zealand – national support group

PARALLEL PAGES

- DRAFT Inflammatory Bowel Disease (IBD)
- Inflammatory Bowel Disease (IBD)

SOURCES

References

1. Halmos EP, Gibson PR. Dietary management of IBD – insights and advice. Nat Rev Gastroenterol Hepatol. 2015 Feb 3;12(3):133-46. [Abstract]

2. Truelove SC, Witts LJ. Cortisone in ulcerative colitis: final report on a therapeutic trial. British medical journal. 1955;2(4947):1041-1048. [Abstract]

PAGE INFORMATION

Last Updated: —

Last Reviewed: —

Next Review: —

Keywords: crohn
crohn's
crohns

Topic ID: 917178

Hospital HealthPathways MidCentral

Constipation in Adults

See also Constipation in Oncology and Palliative Care.

Red flags

- Weight loss
- Abdominal mass
- Iron deficient anaemia
- Blood mixed with stool
- Palpable or visible rectal mass

Background

▼ About constipation in adults

About constipation in adults

Constipation is difficulty passing small hard stools or not passing stool of any consistency for 3 days or longer. The consistency of the stool rather than the frequency of defecation should be the focus.

Most patients with idiopathic constipation are otherwise asymptomatic.

Assessment

1. History – assess constipation and associated features:
   - Frequency and consistency of motions, presence of alternating diarrhoea. See Irritable Bowel Syndrome (IBS).
   - Difficulty defecating, e.g. straining, sense of incomplete evacuation, inability to pass stool despite urge
   - Duration of symptoms – lifelong or recent change
   - Blood, lumps, pain, soiling of underwear
   - ▼ Constipating drugs

Constipating drugs

Constipating drugs commonly prescribed in hospital patients include:

- opioids, especially codeine.
- atypical antipsychotics, e.g. clozapine, olanzapine.
- tricyclic antidepressants.
- anticholinergics.
- antiemetics, e.g. ondansetron.
- calcium channel blockers.
- aluminium hydroxide.

History will suggest a cause in the vast majority of cases.

2. Consider whether primary constipation. This is most commonly caused by anismus (failure of normal relaxation of pelvic floor muscles during attempted defecation), and more rarely by slow colonic transit.
3. Consider ✓ secondary causes .

Secondary causes

- Tumour – colorectal or pelvic mass
- Hypothyroid
- Depression
- Hypercalcaemia
- Eating disorder
- Pregnancy

4. Examine abdomen and rectum. If anal tone is increased or pelvic floor muscles fail to relax when the patient is asked to simulate defecation, consider animsus.
5. Arrange investigations if indicated:
   - Plain abdominal X-rays are not automatically indicated for investigating constipation. If there is suspicion of significant faecal loading or an alternative diagnosis (e.g. bowel obstruction) an abdominal X-ray is indicated.
   - Blood tests are not usually necessary but will depend on differential diagnosis. Consider calcium, phosphate, and thyroid function tests if clinically indicated.
   - If ✓ red flags or colorectal symptoms suspicious for malignancy are present, consider further investigations, e.g. colonoscopy or CT colonography.

Red flags

- Weight loss

- Abdominal mass
- Iron deficient anaemia
- Blood mixed with stool
- Palpable or visible rectal mass

- If abdominal or rectal mass present, seek general surgery advice.

Management

Specialist assessment is not usually required, unless a specific underlying cause or a red flag is identified.

1. If animsus is suspected, consider requesting non-acute gastroenterology assessment for biomechanical feedback treatment.
2. Provide patient education resources.
3. Avoid giving the patient ⌄ constipating drugs if possible.
4. Advise ⌄ simple measures to help relieve and prevent recurrence of idiopathic constipation.

Simple measures

- Maintain adequate dietary fibre. Warn the patient that this can worsen abdominal pain or bloating if constipation is moderate to severe.
- Avoid dehydration. Excess fluid will be ineffective.
- Respond rapidly to urge to defaecate
- Go to the toilet at least once a day, even if no urge to pass stool.
- Exercise regularly.

5. Consider medications:
   - Initial trial of ⌄ bulk-forming laxatives .

Bulk-forming laxatives

Increase faecal mass, which stimulates peristalsis.

Only suitable for mild constipation. Avoid in moderate to severe constipation as may cause abdominal pain and bloating.

Full effect may take some days to develop.

Valuable in patients with small hard stools, if increase in dietary fibre is not sufficient to relieve constipation.

Adequate fluid intake must be maintained to avoid intestinal obstruction. Avoid in pre-existing intestinal obstruction.

Common side effects include flatulence and abdominal distension.

Common preparations include:

- NZF psyllium, e.g. Mucilax, Metamucil, Konsyl-D.
- NZF sterculia, e.g. Normacol, Normacol Plus (also has stimulant action).

- If constipation is due to opioids, see Canterbury District Health Board Palliative Care Service Guidelines – Management of Constipation Associated with Opioid Use flow chart.
- If hard stool is filling the rectum, or oral treatment is ineffective, consider suppositories and/or enemas:
  - NZF Glycerol suppositories
  - NZF Bisacodyl suppositories
  - NZF Micolette or Microlax enema
  - NZF Phosphate enema – should usually be avoided in the elderly or those with chronic kidney disease as there have been cases of phosphate nephropathy and acute kidney injury, some of which have been fatal. However, if non-phosphate enema products are not available, phosphate enema may be used with precautions, including ensuring adequate hydration and minimising the number of doses used.
- Other options include:
  - Bulk-forming laxatives
  - Stimulant laxatives

Stimulant laxatives

These laxatives:

- increase intestinal motility and often cause abdominal cramps.
- should be avoided in intestinal obstruction.
- can cause electrolyte disturbance.
- are mainly for patients with soft stools.
- are recommended for opiate-induced constipation.

Common preparations include:

- NZF bisacodyl, e.g. Lax-tabs, Dulcolax, Fleet.
- NZF dantron (only in terminally ill patients due to potential carcinogenicity).
- NZF senna, e.g. Laxsol, Coloxyl (docusate sodium) and senna, Senokot.
- NZF glycerol suppositories.

  - Osmotic laxatives

Osmotic laxatives

These:

- increase the amount of water in large bowel, either by drawing fluid from the body into the bowel or retaining the fluid the laxative was administered with.
- should be avoided in intestinal obstruction.

Common preparations include:

- oral NZF lactulose, rectal NZF sodium citrate (e.g. Micolette).
- second-line option – oral NZF macrogols (e.g. Molaxole). These are cheaper on prescription rather than over the counter.

- Stool softening agents

Stool-softening agents

Docusate sodium probably acts as both a stimulant and a softening agent.

They should be avoided in intestinal obstruction.

Combination products with additional stimulants often cause abdominal cramps.

Common preparations include NZF docusate sodium, e.g. Coloxyl.

6. If the patient is pregnant, and dietary and lifestyle changes fail to control constipation, advise the patient to use moderate doses of poorly absorbed laxatives.
   - A bulk-forming laxative (e.g. psyllium husks) should be tried first.
   - An osmotic laxative (e.g. NZF lactulose, Molaxole) can also be used.

Request

- Consider requesting non-acute gastroenterology assessment if animsus is suspected.
- Seek general surgery advice if rectal or abdominal mass present.

Information

For health professionals

Education

BMJ Learning – The Royal New Zealand College of General Practitioners Modules [requires registration] – Constipation: A Guide to Diagnosis and Management

For patients

- HealthInfo – Constipation in Adults
- HealthInfo – Fibre and Fluid for Healthy Bowels
- Ministry of Health – Constipation
- Patient – Constipation

Search My Medicines for patient information leaflets for any medications not listed in this section.

Contact the HealthInfo team at info@healthinfo.org.nz if you have any resources that you would like us to consider for this section.

KEY LINKS

Management of Constipation Associated with Opioid Use

PARALLEL PAGES

Constipation in Adults

DRAFT Constipation in Adults

Constipation in Adults

PAGE INFORMATION

Last Updated:	05 May 2021
Last Reviewed:	23 October 2019
Next Review:	01 October 2022
Keywords:	Enema
	Enemas
	Faecal impaction
	Laxative

Laxatives

Opiate

Opiates

Topic ID: 234359

Hospital HealthPathways MidCentral

Acute Pain in Adults

Caution: This page is in development.

STYLE-ALIGNED
DRAFT PHASE
First

region's changes
Streamliners' changes
queries

See also:

- Chronic or Persistent Pain
- Pain in Palliative Care and Cancer

Background

About acute pain in adults

About acute pain in adults

Acute pain is pain of recent onset and probable limited duration. It usually has a causal relationship to injury or disease.

It requires thorough evaluation and appropriate management. The aim is to do all the following:

- control pain while continuing to diagnose and treat the primary disease.
- improve functional ability.
- minimise side-effects of therapy.

Appropriate management of acute pain can:

- improve patient comfort.
- improve mobility.
- reduce physiological stress.
- reduce progression to persistent pain.

Multimodal analgesia involves using several different analgesics (with different mechanism of action) simultaneously to improve analgesia and reduce side-effects, by lessened dosing of any one agent.

A wide range of modalities is used to manage severe acute pain. These include:

- oral, transdermal, or parenteral analgesics.
- patient-controlled analgesia (PCA).
- ketamine infusions.
- lignocaine infusions.

- regional nerve blocks and wound blocks or catheters.
- intrathecal morphine.
- epidural infusions.

Opioids are the most potent analgesics and should be considered where there is a diagnosis of severe pain. Morphine remains the gold standard and is generally well tolerated, although nausea and constipation can be a problem.

A summary of the opioid dosing guidance used in this pathway is available as a quick reference card for attaching to a lanyard.

Assessment

1. Take a history.
   - Pain history:
     - Character, severity (pain score) , and cause of pain.

Pain score

Rating	Pain level
0	No pain
1 to 3	Mild pain (nagging, annoying, interferes little with ADLs*)
4 to 6	Moderate pain (interferes slightly with ADLs)
7 to 10	Severe pain (disabling, unable to perform ADLs)
	*ADLs is the abbreviation for activities of daily living

This content is used in other pages on this site – ask your writer for details.

     - Functional impact of pain, e.g. ability to sleep, mobilise, breathe.
     - Duration of pain. Acute pain for more than 2 months increases the risk of developing chronic pain.
   - Any factors that might affect the patient's pharmacodynamics, e.g. weight, age, liver or renal disease , chronic opioid use or misuse.
   - Drugs:
     - Current medications, especially opioids and sedatives.
     - Previous adverse effects or allergic reactions to any analgesic drugs.

- Patients already enrolled in an opioid substitution programme, as the use of opioid analgesia can be challenging.

- Co-morbidities, e.g. obesity, obstructive sleep apnoea, respiratory failure, hypovolaemia, raised intracranial pressure.

- Recent surgery:
  - If the acute pain presents after surgery, assess ⌄ risk factors for persistent pain after surgery .

> **Risk factors for acute persistent pain after surgery**
>
> Preoperative risk factors:
>
> - Female, younger age
> - Pain before surgery
> - Preoperative chronic pain
> - Multiple sites of pain
> - Preoperative anxiety, fear, depression, or catastrophisation
> - Low income, low self-rated health, lack of education
> - Genetic risk factors
>
> Intraoperative risk factors:
>
> - Site, e.g. thoracotomy, sternotomy, major limb amputation
> - Extent and duration of surgery
> - Incision type
> - Nerve damage
> - Lack of multimodal analgesia use
>
> Postoperative risk factors
>
> - Unrelieved pain
> - Severe pain
> - Surgery in a previously injured area
> - Amount of analgesics consumed (in the first 7 days)
> - Re-operations
> - Lack of follow-up in at-risk patients

  - Identify ⌄ psychological risk factors for developing chronic pain.

> **Psychological risk factors**
>
> A patient's understanding and interpretation of symptoms (beliefs and cognition) can modulate their pain experience. Psychological risk factors include:

- fear avoidance
- catastrophising
- pain behaviour
- low self-efficacy
- anxiety and depression

2. Look for factors that might predispose the patient to adverse effects from analgesics:
   - Obesity
   - Obstructive sleep apnoea
   - Old age
   - Respiratory disease
   - Pregnancy or breastfeeding
3. Look for specific signs and symptoms of complex regional pain syndrome (CRPS) .

Complex regional pain syndrome (CRPS)

It is essential to make an urgent referral to a pain specialist for assessment.

Diagnosis:

- History of a harmful event or immobilisation
- Signs and symptoms, not necessarily isolated to the affected limb, such as:
  - pain
  - sensory changes e.g. paraesthesia, hyperaesthesia, allodynia
  - skin temperature changes
  - skin colour changes
  - altered sweating
  - weakness, tremor, dystonia
  - changes to texture or growth of skin, hair, nails

This content is used in other pages on this site – ask your writer for details.

4. Consider specific causes of the acute pain:
   - Renal colic
   - Abdominal pain
   - Chest pain
   - Acute scrotal pain
   - Neuropathic pain (e.g. herpes zoster, spinal cord injury, peripheral nerve injury)

- Malignancy

Management

Practice point

Do not stop methadone or buprenorphine + naloxone

When managing acute pain, do not stop methadone or buprenorphine + naloxone without consulting the Acute Pain Management Service. If a patient's treatment is stopped without support they are likely to relapse into illicit opioid use, and re-establishing treatment is complex.

1. Give simple analgesia to all patients unless contraindicated:
   - Paracetamol

     Paracetamol

     - Paracetamol orally 1 g four times daily.
     - Consider dose reduction if any of:
       - elderly
       - frail
       - low weight
       - malnutrition
       - liver disease
     - Use the intravenous (IV) route only when other routes are unavailable, impractical, or where there is reduced oral absorption. Reassess use every 24 hours.

   - NSAIDs

     NSAIDs

     Relative contraindications include:

     - advanced age (consider avoiding or dose reduction)
     - bleeding disorders
     - renal dysfunction
     - upper gastrointestinal dysfunction
     - asthma (may cause bronchospasm or angioedema)
     - fractures (may impair bone healing)
     - bowel surgery (increases risk of anastomotic leak)

Options include:

- NZF ibuprofen orally 400 mg to 600 mg every 6 to 8 hours, up to maximum of 2400 mg per day.
- NZF diclofenac orally up to 150 mg per day in divided doses.
- NZF naproxen orally up to 1000 mg per day in divided doses.
- ⌄ selective inhibitors of cyclo-oxygenase-2 (COX-2).

Selective inhibitors of cyclo-oxygenase-2 (COX-2)

These have a lower incidence of serious upper gastrointestinal side-effects, including bleeding.

- NZF Celecoxib orally 100 mg to 200 mg every 12 hours. Community funding by application only.
- NZF Parecoxib IV is often given in theatre for post-operative analgesia. Withhold further NSAIDs for a minimum of 12 hours after parecoxib administration.

See NZ Formulary – NZF NSAIDs for further guidance.

2. If the patient is on an opioid substitution programme and opioid analgesia is being considered:
   - Continue the NZF methadone, or NZF buprenorphine + naloxone, at the patient's usual dose. Do not stop, decrease, or increase the dose.
   - Discuss dosing of opioid analgesia with the patient's registrar or consultant. Consider seeking acute pain management advice.
3. Manage according to severity of pain:
   - ⌄ Severe acute pain ***[SNZ query inside]***

1. Decide the most appropriate medication:
   - ⌄ Opioids

Opioids [1]

- See Opioid Dosing for Severe Acute Pain in Adults.
- Avoid co-administration of other opioids or sedatives, except:
  - tramadol, which may be used with other opioids.
  - pre-existing background opioids, which should be continued.
- Ensure you know where naloxone is stored on the ward.
- Use morphine as the first line opioid for intermittent or as required dosing, unless renal impairment.

- If renal impairment (creatinine clearance less than 30 mL/min) or history of morphine intolerance, consider:
  - fentanyl IV or subcutaneous.
  - oxycodone orally.
- Pethidine is not routinely recommended.

Pethidine

Not recommended because:

- it does not have any specific benefit in smooth muscle spasm.
- it is almost never used in chronic or persistent pain, as there are more effective and less toxic alternatives, e.g. transdermal fentanyl, oxycodone, methadone.
- toxicity with convulsions can be an issue.

- Other options

Other options

- Patient-controlled analgesia (PCA):
  - If needing more than a short period of intermittent IV opioid analgesia, consider PCA.
  - Seek acute pain management assessment.
- Entonox:
  - Entonox (NZF 50% nitrous oxide and 50% oxygen) may be a useful analgesic for:
    - moderate to severe pain while awaiting definitive analgesia, particularly for fractures, dislocations, and traumatic wounds.
    - short-term severe pain, e.g. wound dressings.
  - The practitioner must be trained in its use.
- Regional anaesthesia:
  - Local anaesthetic agents can be useful for providing sensory block of specific dermatomes, e.g. femoral nerve block for fractured femur, abdominal wound catheters.
  - Seek acute pain management assessment.
- Gabapentin or pregabalin:
  - Consider if:
    - major surgery.
    - the patient has anxiety or sleep problems.

- acute neuropathic pain (e.g. peripheral nerve injury, spinal cord injury, herpes zoster, amputation).
- trauma, especially if neuropathic features.
- the patient is opioid-tolerant and non-opioid analgesics may be more beneficial.

- See Adult Gabapentinoid Acute Pain Prescribing Advice .

2. If the patient has rib fractures, see the Adult Chest Trauma Analgesic Pathway .
3. Consider ⌄ dosing .*[SNZ query inside]*

Dosing considerations

- Consider:
  - Weight
  - Age
  - Obstructive sleep apnoea
  - Respiratory disease
  - Renal or liver disease
  - Pregnancy or breastfeeding
- ⌄ Predict the dose .

Dose prediction

- Age is the best dose predictor. Lower doses are usually required with increasing age.
- In renal impairment, morphine metabolites may accumulate.
  - If mild to moderate renal impairment, consider lower dose and longer dosing interval.
  - If more severe renal impairment (⌄ creatinine clearance *[CE comment inside shared DB]* less than 30 mL/min) consider alternatives, e.g. oxycodone or fentanyl.

eGFR

In practice GFR is estimated either by the ⌄ Cockcroft and Gault formula or laboratory eGFR . *[CE comment within]* Both provide a guide to GFR which is adequate for most clinical situations. These formulae are unreliable at extremes of weight and/or when the creatinine is changing. Seek advice from Medicines Information.

Estimated glomerular filtration rate (eGFR)

- eGFR is an estimate of renal function. A stable plasma creatinine improves the validity of the eGFR.
- Use the creatinine clearance (Cockcroft and Gault calculator) or the laboratory eGFR. Either actual, ideal, or adjusted weight can be used for the calculation and will generate differing creatinine clearance results. Use the result that is the lowest creatinine clearance value generated by the Cockcroft and Gault calculator.
- For further guidance, see the MidCentral DHB guidelines:
  - Prescribing in Chronic Kidney Disease
  - Prescribing in the Obese Adult

[CE to provide MCDHB links]

This content is used in other pages on this site – ask your writer for details.

This content is used in other pages on this site – ask your writer for details.

- Dose adjustment may be required at extremes of body weight, e.g. underweight patients may require less, overweight patients may require more.
- Assess general physical condition and frailty. Give less opioid if frail or poor general condition.
- For opioid-naive patients, begin at the lower end of dose range.
- If pre-existing opioid use, tolerance occurs, so larger doses are often required.

This content is used in other pages on this site – ask your writer for details.

- Individualise the therapy:
  - Titrate agent and aim for minimum side-effects.
  - Use low-dose multi-modal medication to reduce the likelihood of side-effects.
  - If the patient has liver disease, renal disease, or is elderly, drug metabolism and excretion may be reduced. Consider reducing dose and frequency, or changing to a more appropriate analgesic.
  - If obesity or obstructive sleep apnoea, be cautious with opioids as these patients are at increased risk of sedation and respiratory depression.

- If the patient is pregnant or breastfeeding, see Medications in Pregnancy and Breastfeeding.*[SNZ: 'Medications in Pregnancy and Breastfeeding' pathway not on MidCentral HHP – remove bullet point?]*
- For further guidance, see The Pink Book .*[SNZ: Remove? Are there MidCentral DHB Guidelines instead?]*

4. Chart the medication, ⌄ method of administration , safe dose range, and dose interval according to hospital protocols (available on a lanyard card).

Method of administration

- Oral administration is usually the route of choice.
- If oral absorption is compromised, e.g. ileus, consider subcutaneous route as an alternative.
- Consider intravenous (IV) administration in the initial treatment of severe acute pain when other routes would be inappropriate, e.g. rapid analgesia is required.
- If ongoing IV therapy is required, request acute pain management assessment to consider patient-controlled analgesia (PCA).

This content is used in other pages on this site – ask your writer for details.

- If prescribing opioids:
  - Administer simple analgesics as well, unless contraindicated, e.g. paracetamol, NSAIDs.
  - Prescribe antiemetic and laxative medications, unless contraindicated.
  - Only give intermittent opioids by one route at a time.
- If in the emergency department, higher initial doses may be used with close monitoring. See ED Adult Acute Pain Dosing Guide, available in the department. *[SNZ: Is there a link for this guide?]*

- ⌄ Mild to moderate acute pain

If mild to moderate pain, or when stepping down from stronger opioids, consider:

- Adding a weak opioid:
  - ⌄ Codeine

Codeine

- NZF Codeine phosphate orally 15 mg to 60 mg every 4 to 6 hours. Maximum total daily dose is 240 mg.

- It is slow to act and has low analgesic potency, so is less useful for severe pain.
- About 10% of people are poor metabolisers and do not benefit from codeine. Others are rapid metabolisers and get much greater effects.
- If taking a selective serotonin re-uptake inhibitor (SSRIs), codeine phosphate may be less effective.
- Constipation is a common side-effect, so consider regular laxatives.

- Tramadol

Tramadol

- Avoid if:
  - history of seizures.
  - monoamine oxidase inhibitor (MAOI) use within 14 days.
- Use with caution if taking other agents that increase serotonin, e.g. SSRI, tricyclic antidepressant.
- NZF Tramadol orally:
  - immediate release 50 mg to 100 mg every six hours, or
  - slow release 50 mg to 100 mg every twelve hours.
- Intravenous injection 50 mg to 100 mg every four to six hours.
- Maximum 400 mg total daily dose. Lower maximum dose if elderly or renal impairment.
- Less constipating than codeine and has a quick onset of action.
- May cause nausea, vomiting, and confusion, particularly in elderly patients.
- Serotonin toxicity is a rare adverse effect.
- Note that ondansetron and tramadol have opposing actions on the 5-HT3 receptor, resulting in reduced efficacy if given together.

- Entonox

Entonox

Entonox (NZF 50% nitrous oxide and 50% oxygen) may be a useful analgesic for:

- moderate to severe pain while awaiting definitive analgesia, particularly for fractures, dislocations, and traumatic wounds, or
- short-term severe pain, e.g. wound dressings.

The practitioner must be trained in its use.

4. Prevent or treat any side-effects:

- Respiratory depression and sedation

Respiratory depression and sedation

Respiratory depression and sedation are potentially life-threatening complications of opioids. Sedation is an early warning sign as it usually precedes respiratory depression. Calculate the NZEWS score .

New Zealand Early Warning Score (NZEWS)

Score	Call clinical emergency team	3	2	1	0	1	
Zone	Blue	Red	Orange	Yellow	White	Yellow	Ora
Respiratory rate (per minute)	≤ 4	5–8		9–11	12–20		21-
Oxygen saturation (%)		≤ 91	92–93	94–95	≥ 96		
Supplemental oxygen			Yes		No		
Temperature (°C)			≤ 34.9	35–35.9	36–37.9	38–38.9	≥
Systolic blood pressure (mmHg)	≤ 69	70–89	90–99	100–109	110–219		
Heart rate (per minute)	≤ 39		40–49		50–89	90–110	11 1:
Level of consciousness	Unresponsive or fitting	Voice or pain			Alert		

Source: Canterbury DHB. Reproduced with permission.

All scores are added together for aggregate score (total NZEWS).

Total NZEWS:

- 10 or more, or any single blue parameter – Blue zone, immediately life-threatening critical illness

- 8 to 9 – Red zone, likely to deteriorate rapidly
- 6 to 7, or any red parameter – Orange zone, acute illness or unstable chronic disease
- 1 to 5 – Yellow zone
- 0 – White zone, no additional action required

See New Zealand Early Warning Score .

Act on single blue or red parameters according to the escalation pathway for response.

This content is used in other pages on this site – ask your writer for details.

- If life-threatening:
  - Call for help and activate a clinical emergency.
  - Stimulate the patient.
  - Support ventilation and airway with bag and mask.
  - Give oxygen.
  - Stop opioid administration.
  - Give naloxone .

    Naloxone

    - Naloxone IV injection 100 micrograms to 200 micrograms repeated every 2 to 3 minutes until desired effect.
    - May need up to 10,000 micrograms (10 mg).
    - Monitoring is essential as the effect of naloxone can wear off before that of the opioid – the half-life of naloxone is approximately 1 hour, which is shorter than most opioids.
    - A naloxone infusion may be required. Seek acute pain management advice and see the Canterbury DHB's Adult Naloxone policy for further details.

  - After resuscitation, seek acute pain management advice to manage ongoing analgesia.
- If non-life-threatening:
  - Stop opioid administration.
  - Give oxygen by mask.
  - Increase monitoring as per EWS management protocol.
  - Consider low dose naloxone intravenous (IV) in 40 microgram increments. If more than two doses of naloxone are required or any ongoing concerns, seek acute pain management advice.

- Nausea and vomiting. See Postoperative Nausea and Vomiting for antiemetic guidance.
- Constipation

Constipation

- Prescribe prophylactic laxatives when starting opioids, unless contraindicated.
- NZF Docusate + sennoside B orally 1 or 2 tablets twice a day.
- Second line options include:
  - NZF paraffin liquid (e.g. Mineral Oil) enema once daily as required.
  - NZF glycerol suppositories rectally 1 or 2 once daily as required.
  - NZF sodium citrate (e.g. Micolette) enema once daily as required. Microlax is no longer a funded brand.
  - NZF oral macrogols (e.g. Molaxole) 1 to 2 sachets as required, up to every 12 hours.
- See also Constipation in Adults.

- Opioid-induced hyperalgesia

Opioid-induced hyperalgesia

- A clinical syndrome where a patient experiences increased pain, usually to touch, as a result of too high a dose of opioid, or where the opioid has been increased too rapidly. 2
- May improve on dose reduction.
- If required, seek acute pain management advice.

5. Individualise the therapy *[SNZ query inside]* and monitor response to any new medication.

Individualise the therapy

The optimum dose of analgesic can vary quite widely between similar patients and in the same patient from time to time.

- Do not change a drug until it has been fully evaluated.
- If the patient is receiving opioids for chronic or persistent pain and presenting with an acute episode of pain, higher dosing may be needed. Reassess at regular intervals and adjust prescription accordingly.

Higher dosing for patients on long-term opioids

- Higher doses of breakthrough analgesia may be needed to gain effect compared to opioid-naive patients.

- Seek acute pain management advice or acute palliative care advice, as appropriate.

- If the patient has liver disease, renal disease, or is elderly, drug metabolism and excretion may be reduced. Consider reducing dose and frequency, or changing to a more appropriate analgesic.
- For further guidance, see controlled document MDHB 4184.*[SNZ: Link for this?]*

6. If the patient has cancer, see Pain in Palliative Care and Cancer.

Discharge

Opioids are not recommended for routine prescription on discharge due to ⌄ risks in the community .

Risks of opioids in the community

- Persistent opioid use – risk factors for this include smoking, alcohol abuse, substance abuse, mood disorders, anxiety, history of pain disorders
- Accidental overdose
- Drug diversion

1. Ensure the patient is ready for discharge. High opioid requirements may mean that they are not suitable for discharge.
2. If the patient was on opioids before admission:
   - It is usually more appropriate for the patient's general practitioner to arrange ongoing opioid prescriptions.
   - If they are on an opioid substitution programme, do not prescribe opioids or benzodiazepines without discussing with the Community Alcohol and Drug Service.
3. If opioids are required:
   - Discuss with the patient's general practitioner by phone, and record clearly in the discharge summary that the patient is on opioids, and the plan for tapering.
   - ⌄ Prescribe the opioids for discharge .

Prescribe the opioids for discharge

- Use weaker opioids such as NZF tramadol and NZF codeine instead of strong opioids such as NZF morphine and NZF oxycodone, if appropriate. Strong opioids are unlikely to be appropriate on discharge if they have not been required in the previous 12 hours.
- Prescribe doses at equal or less than those required in the 24 hours before discharge.
  - If it is necessary to prescribe strong opioids, give at a maximum frequency of every 4 hours after discharge (not every 2 hours as in hospital).

- Prescribe NZF tramadol and NZF codeine at a maximum frequency of four times a day.
- Do not prescribe slow release preparations of opioids.

- Specify the total amount to be dispensed, e.g. number of tablets, volume of liquid:
  - Prescribe up to 7 days' supply. If considering a longer duration:
    - discuss with the patient's registrar or consultant.
    - arrange a general practitioner review.
  - Anticipate a need for opioid analgesia that reduces each day. Adjust the total amount to be dispensed by ✓ prescribing half the number of tablets that would be required for the maximum dose through the whole time period.

> **Prescribing half the number of tablets**
>
> Examples of number of tablets to supply at discharge:
>
> - Codeine phosphate oral 30 to 60 mg up to four times daily as required for 7 days would mean a maximum of 56 tablets (30 mg strength) are dispensed (8 tablets times 7 days). Halve this and supply 28 tablets.
> - Morphine oral 10 mg up to every four hours as required for 5 days would mean a maximum of 30 tablets (10 mg strength) are dispensed (6 tablets times 5 days). Halve this and supply 15 tablets.

- Prescribe laxatives, unless contraindicated.
- Arrange general practice team review within 2 weeks if:
  - CRPS suspected.
  - the patient has any risk factors for developing chronic pain.
  - the patient is likely to require ongoing prescription analgesia.

4. Provide ✓ patient education .

> **Patient education**
>
> - For all patients, provide the Pain relief for adults on discharge from hospital information.
> - For patients on opioids, ensure they receive verbal and written education about the opioids, including clear dosing instructions and possible side-effects:
>   - Codeine
>   - Morphine (long-acting)
>   - Morphine (short-acting)
>   - Oxycodone (short-acting)
>   - Oxycodone (long-acting)
>   - Tramadol

Request

- Seek acute pain management assessment for:
  - any advice, including the appropriate analgesic technique.
  - patient-controlled analgesia (PCA) or regional anaesthesia.
  - acute pain in patients on regular opioids.
  - opioid-related sedation or respiratory depression, including naloxone infusions and ongoing pain management.
  - CRPS.
- If acute severe pain with cancer, seek acute palliative care advice.

Information

For health professionals

Further information

- Australian and New Zealand College of Anaesthetists and Faculty of Pain Medicine – Acute Pain Management: Scientific Evidence
- Canterbury DHB:
  - Adult Surgical-based Intravenous (IV) Incremental Opioid Protocol
  - Emergency Department Acute Pain Guideline (available in department)

For patients

- Canterbury DHB – ED Adult Pain Relief Patient Information
- HealthInfo:
  - Pain Relief After an Injury
  - Pain Relief for Adults on Discharge from Hospital
- Health Navigator – Acute Pain
- My Medicines:
  - Codeine
  - Diclofenac

- Ibuprofen
- Morphine (Long-acting)
- Morphine (Short-acting)
- Naproxen
- Oxycodone (Long-acting)
- Oxycodone (Short-acting)
- Paracetamol
- Tramadol

PARALLEL PAGES

- Analgesia in Adults with Acute Injuries
- DRAFT Analgesia in Adults with Acute Injuries
- Analgesia in Adults with Acute Injuries

SOURCES

References

1. Choosing Wisely: Tests, Treatments and Procedures Health Professionals Should Question. Choosing Wisely New Zealand; 3. Do not prescribe opioids for the treatment of acute or chronic pain without assessing the patient's clinical condition, potential side effects, alternative analgesic options, work status, and capacity to perform safety-critical activities such as driving a motor vehicle. 2019. [cited 2019 Mar 31]. [Abstract]

2. Silverman SM. Opioid induced hyperalgesia: clinical implications for the pain practitioner. Pain physician. 2009;12(3):679-684. [Abstract]

PAGE INFORMATION

Last Updated: ——

Last Reviewed: ——

Next Review: ——

Keywords: analgesia
codeine
entonox

fentanyl

morphine

opiate

oxycodone

oxycontin

oxynorm

pain

paracetamol

PCA

tramadol

Topic ID: 951543