education

FROM THE JOURNALS Edited highlights of weekly research reviews on https://bit.ly/2PLtil8

Fat in Mexico

Gnatiuc et al prospectively measured the waist circumference, waist to hip ratio, and body mass index (BMI) of 150000 residents of Mexico City and followed them for 14 years. These data confirm that each 5 units of BMI above 25 were associated with a 30% increase in mortality even after



adjustment for confounders. A strong association with mortality was also shown for waist to hip ratio and waist circumference. The researchers excluded people who, at recruitment, had an HbA_{1c} indicative of diabetes or a pre-existing chronic disease (including diabetes, renal disease, vascular disease, cancer, liver cirrhosis, and emphysema). They found that these conditions distort the association between obesity and mortality, because lower BMI could be protective for disease but can also be a consequence of chronic disease. Nice work.

Ann Intern Med doi:10.7326/M18-3502

Bowel preparation before colectomy

Does bowel preparation before colectomy reduce surgical site infections, including anastomotic leak? This Finnish trial randomised people to either mechanical and oral antibiotic bowel preparation or no bowel preparation. It found no difference in the rates of surgical site infections between groups. Rates of anastomotic leak and re-operation were very similar. This is research the way it should be. The surgeons had an inkling that mechanical and oral antibiotic bowel preparation might be beneficial based on observational data, but this could be confounded by comorbidities causing some patients to be less likely to receive bowel preparation and also more likely to get surgical complications. A randomised study was essential, and the trial was well designed to answer the question, particularly by pushing for blinding of all staff as much as possible to avoid bias.

Lancet doi:10.1016/S0140-6736(19)31269-3

Out of network billing

Brits, prepare to be shocked. Imagine you ended up going to a hospital outside of a pre-defined group of hospitals because of the timing or nature of your medical issue and that you got charged for this. (Of course in the US it's an extra charge because you were going to get some charge anyway, but this would mostly be covered by the private insurance you had taken out.) That would be considered pretty outrageous. Well this is common in the US, and the proportion of emergency department visits and inpatient admissions generating "out-of-network" billing has risen to 42% in 2016. This places an additional financial burden on patients. This seems inherently unfair to patients, who may not have much choice as to where and when they become unwell.

JAMA Intern Med doi:10.1001/jamainternmed.2019.3451

Hypertension patterns and dementia

Walker and colleagues performed a prospective cohort study of people with blood pressure measurements in both midlife and late life and had 24 years of follow-up. Five hypertension patterns were defined, and rates of cognitive impairment and dementia were compared between groups. Midlife normotension with late life hypertension had a high risk of dementia. Midlife hypertension followed by late life hypertension had an even higher risk of dementia. And so did midlife normotension with late life hypotension compared with people who remained normotensive. This is very interesting. While hypotension could adversely affect the brain, there may be more at work here. For example, cognitive impairment may lead to low blood pressure due to changes in lifestyle resulting from the cognitive impairment.

JAMA doi:10.1001/jama.2019.10575

New injection for familial chylomicronaemia syndrome

The main issue in familial chylomicronaemia is recurrent episodes of pancreatitis resulting from a



deficiency of lipoprotein lipase. Currently this is treated by lowering plasma triglyceride levels, but this is often inadequate. Volanesorsen was tested in a double blind, randomised controlled trial of 66 people in various countries. It successfully reduced triglyceride levels compared with placebo at 3 months. However, drug related adverse events were more common with some worrying thrombocytopenia, and the trial was too small to draw conclusions about whether the drug prevented acute pancreatitis.

N Engl J Med doi:10.1056/NEJMoa1715944

Alex Nowbar is a clinical research fellow at Imperial College London

How can you prepare patients for surgery?

Many aspects of the preoperative assessment begin in primary care. Consider referral for further cardiopulmonary assessment and specialist review in patients with notable comorbidities. Further preoperative optimisation is generally coordinated by a colorectal cancer preadmission or preoperative assessment clinic.

Enhanced recovery after surgery (ERAS)

ERAS programmes (box 1) are considered the standard of care in the perioperative management of patients undergoing colorectal surgery. They aim to reduce the impact of surgery on the patient and optimise postoperative recovery using a range of perioperative interventions.

Institutions vary widely in their ERAS protocols and compliance. Use of ERAS protocols in patients undergoing colorectal surgery reduced length of hospital stay (mean difference 2.44 days, 95% confidence interval –3.06 to –1.83 days, P<0.00001) and overall complications (relative risk 0.71; 95% confidence interval 0.58 to 0.86, P=0.0006), as per a meta-analysis (13 randomised controlled trials, 1910 patients).⁸

Stomal therapy

Following colorectal surgery, some patients require a temporary or permanent stoma, which can impact their quality of life.9 Patients will likely have concerns about life with a stoma, such as returning to their normal lifestyle, stoma leakages, odour, and fear of intimacy. Common physical complications of stoma include skin excoriation, parastomal herniation, retraction, or prolapse.¹⁰ The decision to form a stoma is complex and depends on factors relating to the tumour (site, size, and staging), treatment (radiotherapy or not), patient (older, comorbidities, patient preferences, hereditary polyposis syndromes), and whether emergency surgery is required, such as in intestinal obstruction or ischaemia. In the elective setting, a permanent colostomy is usually required in patients with low rectal tumours or those involving the anal sphincter complex. Patients with mid to low rectal tumours may require a temporary ileostomy. Reversal can be considered after three months.

Schedule a preoperative consultation on stomal therapy in elective settings. This can take place on an outpatient basis and involves examination by the stomal therapist and selection of an appropriate site for

Enhanced recovery after surgery (ERAS) programmed for colorectal cancer Principles of ERAS include

- preoperative education and counselling
- optimising preoperative nutritional status
- anaesthetic protocols
- early enteral feeding
- prevention of postoperative ileus
- optimal postoperative analgesia
- early mobilisation⁷

the stoma. A stomal consultation is often not feasible if surgery is performed in an emergency setting outside of working hours, in which case the stoma site is selected by a senior surgeon.

Bowel preparation

Mechanical bowel preparation involves use of oral (and/or rectal) osmotic laxative solutions and a clear fluid diet for 24 hours preoperatively to empty the bowel. Multiple randomised controlled trials and subsequent meta-analyses, including a Cochrane review published in 2004,¹³ failed to show a reduction in wound infections or anastomotic leaks.¹⁴⁻¹⁶ Since then mechanical bowel preparation is less favoured among surgeons, particularly for colonic resections. However, it is being revisited after several American studies have shown reduction in postoperative infections after mechanical bowel preparation with oral antibiotics.¹⁷⁻¹⁹ While uncertainty exists, current UK guidelines recommend against the routine use of mechanical bowel preparation before colorectal cancer resections, but state there may be benefit in patients undergoing restorative resection for rectal cancer.20

Nutritional interventions

Malnutrition is common among cancer patients as a result of chemotherapy, radiotherapy, and surgery, and the metabolic effect of malignancy. Patients with colorectal cancer are at higher risk of malnutrition compared with other cancer patients.²¹ Although nutritional assessment and support is routinely provided before colorectal surgery, there remains a paucity of data for its effectiveness.

Preoperative carbohydrate loading is often considered in patients undergoing elective surgery for colorectal cancer. A clear, oral carbohydrate solution is given before midnight on the day before surgery and again 2-3 hours before surgery.

What are the surgical options for colorectal cancer?

Figure 1 depicts the prognosis for patients with colon and rectal cancer based on stage of disease, which will influence the decision on treatment. Survival can vary based on several prognostic factors. The specialist team would typically discuss this with the patient while informing them about the possible outcomes and complications of surgery and adjuvant treatments.

Open surgery

For malignant tumours of the colon and rectum, the segment of bowel containing the tumour and its supplying vascular pedicle is excised, keeping local margins free of malignancy. Radical resection of the mesentery, which contains the supplying vascular pedicle and lymphatic drainage, achieves regional lymphadenectomy. Figure 2 shows the various colorectal resections performed depending on the anatomical location of the tumour.

Laparoscopic surgery

Laparoscopic colectomy is now well established as a safe alternative to open surgery for colon cancer, albeit with a longer operating time. Laparoscopic resection led to modest improvements in short term outcomes, including a reduction in perioperative mortality (odds ratio 0.33; P=0.005), blood loss (weighted mean difference 0.11 L; P<0.00001), wound related complications (odds ratio:0.65; P=0.01), and length of hospital stay (weighted mean difference 1.7 days; P<0.00001), and more rapid return of spontaneous bowel function (weighted mean difference 23.9 hours; P<0.00001) in an earlier meta-analysis (13 randomised controlled trials, 4013 operations).²⁴ Concerns surrounding the oncological and survival outcomes associated with laparoscopic resection remained until long term outcomes were available from large multicentre randomised controlled trials.²⁵⁻²⁸ A subsequent meta-analysis of 12 randomised controlled trials showed no statistically significant difference between laparoscopic and open surgery in cancer related mortality for colon cancer (1575 patients, 14.6% versus 16.4%, 95% confidence interval 0.61 to 1.06, P=0.15) or rectal cancer (578 patients, 9.2% v 10.0%, 95% confidence interval 0.37 to 1.19, P=0.16).29





Debate is ongoing about the role of laparoscopic rectal resection, both in terms of oncological safety and functional outcomes,³⁰ such as continence and sexual function.³¹

What are possible complications? Immediate

Anastomotic leakage is a major complication specific to colorectal surgery and is a major source of morbidity and mortality.³⁴ Other immediate complications are those with any major abdominal surgery and hospitalisation, including infection (particularly of the surgical site), haemorrhage, venous thromboembolism, and inadvertent injury to other anatomical structures.

Long term

More than 80% of patients who undergo sphincter preserving resection (that is, without permanent colostomy) will experience some degree of postoperative

EDUCATION INTO PRACTICE

- How would you discuss bowel, bladder, and sexual function with patients who have had colorectal surgery for cancer?
- How often do you review your patients' stomas for skin excoriation, herniation, retraction, or prolapse?
- How many of your patients with colorectal cancer are at risk of malnutrition?

bowel dysfunction, more recently referred to as anterior resection syndrome. This may include increased frequency, incontinence, or obstructed defecation.³⁵ Risk factors include neoadjuvant therapy and anatomically low tumours.³⁶ Patients should be informed before surgery about the possibility of postoperative bowel related problems. A systematic review (14 non-randomised studies) showed no difference in quality of life outcomes between patients with sphinctersaving surgery and permanent colostomies, however a meta-analysis was not feasible because of study heterogeneity.^{37 38}

Urinary incontinence and sexual dysfunction are also important problems in patients who undergo multimodal treatment of rectal cancer. These have been less well studied than bowel related quality of life,³⁹⁻⁴¹ but both dyspareunia in women and erectile dysfunction in men should be discussed preoperatively. Pretreatment sperm banking may be an option. It is now offered in certain situations in the UK via the NHS.

Low anterior resection	High anterior resection	Sigmoid colectomy	Left hemicolectomy	Right hemicolectomy		
Abdomino-perineal resection	Total proctocolectomy	Subtotal colectomy	Total abdominal colectomy	Extended right hemicolectomy		

Fig 2|Diagram showing different colon and rectal resections performed depending on tumour location (Illustration by Scott Holmes, CMI, printed with permission from Baylor College of Medicine, https://www.bcm.edu/healthcare/care-centers/general-surgery/procedures/colon-resection)

What is the role of adjuvant chemotherapy in colorectal cancer treatment?

Patients with resected stage III colorectal cancer and some patients with high risk stage II colorectal cancer may benefit from adjuvant chemotherapy, as per UK and Australian guidelines. It is intended to address unresected micrometastases which may lead to recurrent disease.⁴⁻⁴² Between 15% and 50% of patients with stage III disease experience a recurrence.⁴³

Patients with stage II colorectal cancer have a lower risk of recurrence, and the benefits of adjuvant chemotherapy are therefore comparatively modest.⁴³ Common side effects of chemotherapy include fatigue, loss of appetite, nausea and vomiting, diarrhoea, bone marrow suppression, and peripheral neuropathy.

What is the role of neoadjuvant radiotherapy in rectal cancer treatment?

Neoadjuvant (preoperative) radiotherapy is recommended for advanced (at least T3 and/or at least N1) rectal tumours in the low and mid rectum. The primary aim is to reduce the risk of local recurrence, but it may also reduce tumour size to facilitate complete excision and lead to modest improvements in survival.⁴⁷ Radiotherapy may be delivered alone ("short course" radiotherapy delivered daily for five days) or combined with 5-flurouracil, most commonly as oral capecitabine ("long course" chemoradiotherapy over five weeks). Current UK, Australian, and European guidelines state either course is acceptable unless the tumour is T4 or there is concern about mesorectal fascial involvement, in which case long course chemoradiotherapy is recommended followed by surgery at 8-12 weeks to maximise reduction in tumour size.⁴⁻⁵⁰

Inform patients of possible side effects, such as perianal skin excoriation, proctitis, incontinence, cystitis, and sexual dysfunction.

How should patients with colorectal cancer be followed up after surgery?

Most recurrent colorectal cancer will develop within two years of surgical resection. The median time from resection to recurrence is between 16 and 22 months.⁵¹ Maintain a high index of suspicion in this period. Note any changes in bowel habit, weight loss, abdominal pain, or a palpable mass. Discuss with the treating surgeon and oncologist to arrange prompt imaging and/or endoscopic evaluation.

Current guidelines from the National Institute for Health and Care Excellence (NICE) recommend testing serum CEA level every six months and undertaking at least two CT scans of the chest, abdomen, and pelvis in the first three years after surgery.⁴ A rising serum CEA level should raise suspicion of recurrence. A surveillance colonoscopy is offered one year after surgery.

Competing interests: None declared.

Cite this as: BMJ 2019;366:l4561

Find the full version with references at http://dx.doi.org/10.1136/bmj.l4561

UNCERTAINTIES

Which operation is most effective for complete rectal prolapse?

Stella Maye Dilke,^{1 2} Claire Becker,³ Phillip James Tozer,² Carolynne Vaizey¹



¹St Mark's Hospital, Harrow, London

²Imperial College Faculty of Medicine, St Mark's Hospital, London ³Spring House Medical Centre, Welwyn Garden City

Correspondence to: S M Dilke stella.dilke@nhs.net

This is one of a series of occasional articles that highlight areas of practice where management lacks convincing supporting evidence. The series advisers are Sera Tort, clinical editor, and David Tovey, editor in chief, the Cochrane Library. To suggest a topic for this series, please email us at uncertainties@bmj.com

Rectal prolapse affects about 2.5 per 100 000 people each year in the United Kingdom.¹ It is more common in women.² Risk factors include multiple deliveries, straining, anorexia, traumatic vaginal delivery, and old age.³ Protrusion of the rectum through the anal canal can be distressing for the patient, causing discomfort and embarrassment. Complications include bleeding, constipation, incontinence, rectal ulcers, and, rarely, rectal ischaemia, which is an emergency.

Complete (full thickness) rectal prolapse involves protrusion containing all the layers of the rectal wall through the anus (figure). A mucosal prolapse occurs when mucosa alone protrudes through the anus. Internal intussusception is a prolapse of the rectum into the distal rectum or anal canal but without protrusion outside the anus.

Surgery is the definitive treatment and can provide complete resolution of full thickness rectal prolapse.⁴ Some patients, however, experience recurrence and complications such as constipation and faecal incontinence and may require further surgery.³ A minority of patients prefer symptom control, or are unfit for surgery, and are treated with laxatives and manual reduction.

In this article we focus on surgical management of full thickness rectal prolapse. There are a range of surgical techniques available (box),²³ but there is no consensus on which is the most effective.⁵ Traditionally, the open abdominal procedure was reserved for younger, fitter patients, and perineal procedures were preferred for older people as they are considered safer.³

HOW PATIENTS WERE INVOLVED IN THE CREATION OF THIS ARTICLE

A patient with a full thickness rectal prolapse awaiting surgery reviewed the manuscript and helped rephrase the box summarising the evidence. The carer of a patient with multiple surgeries for rectal prolapse reviewed this manuscript and expressed agreement with the content overall. We are grateful for their input.

WHAT YOU NEED TO KNOW

- Surgery, through the abdomen or perineum, is the definitive treatment to repair complete rectal prolapse
- A range of surgical techniques are used, but there is insufficient evidence to determine whether one technique is better than others in terms of rates of recurrence and complications such as constipation and incontinence
- Patient preferences and general fitness for surgery are useful to guide decision making

SURGICAL OPTIONS FOR COMPLETE RECTAL PROLAPSE

Abdominal operations—These can be performed open, robotically, or laparoscopically and generally comprise different forms of rectopexy (that is, mobilisation of and hitching up the rectum with sutures or mesh²). Laparoscopy is the commonest technique.

Perineal operations—Traditionally reserved for patients thought unfit to tolerate abdominal procedures. Both Delorme's and Altemeier's procedures have been reported to have a higher recurrence rate than abdominal procedures but are considered less invasive.¹² Delorme's procedure involves resecting redundant mucosa and plication of the muscle layer to shorten the rectum. Altemeier's procedure involves resecting the redundant prolapsed bowel to restore the original anatomy.

Bowel resection—This involves removing a part of the redundant rectum or sigmoid via an abdominal approach, in addition to the repair itself.

What is the evidence of uncertainty?

Current best evidence from a Cochrane systematic review suggests that there is little difference in outcomes among people with full thickness rectal prolapse undergoing different operative repairs.³ Up to a third of patients may experience recurrence of prolapse and other complications such as constipation and faecal incontinence, with either abdominal or perineal surgery. However, the evidence is poor quality and may not represent the true efficacy of the different techniques. There is limited low quality evidence from two trials that laparoscopy may have fewer postoperative complications and reduce hospital length of stay compared with open abdominal surgery. Bowel resection along with repair surgery was seen to improve constipation as per evidence from three trials.

The Cochrane review³ (of 15 randomised controlled trials, 1007 participants) compared different surgical repairs for full thickness rectal prolapse in adults. The main outcomes were rates of recurrence, residual mucosal prolapse, faecal incontinence, and constipation. Recurrence rates ranges from 0 to 33% in the included studies and follow-up periods ranged from six months to five years. No difference in recurrence, complications, or quality of life for patients was seen between abdominal and perineal surgery. The authors concluded there were insufficient data to suggest whether the abdominal or perineal approach is more effective, or to determine superiority of the different surgical techniques with either approach. About a third of patients experienced complications-including constipation, incontinence, and reduced rectal compliance (a measure of pressure changes associated with increasing the

volume of a rectal balloon)—in the two studies directly comparing abdominal and perineal surgery.

The evidence from studies within the Cochrane review offers further insight. For example, two studies (60 patients) compared laparoscopy to open surgery and found fewer postoperative complications and shorter hospital stay with laparoscopy. Bowel resection during rectopexy was associated with lower rates of constipation than rectopexy alone (115 patients across three studies). There was a higher risk of reduced rectal compliance (resulting in faster gut transit time) in the resected group, but there were no other statistically significant differences between groups.

High quality evidence is lacking: major methodological limitations of the studies include heterogeneity in patient populations, interventions, and outcomes; only five studies had a sample size greater than 50; and no more than three studies compared any single technique.

Two small randomised controlled trials published since 2015 compared abdominal approaches, including laparoscopic surgery versus robotic rectopexy,⁶ and suture rectopexy versus mesh rectopexy.7 Following the Cochrane review, further systematic reviews have included observational data,⁸ evaluated abdominal surgery,⁹ and compared different perineal procedures.¹⁰ The visual summary describes the findings of these studies. Different techniques have been compared but the studies are small, outcome measures differ, and follow-up is generally short. Overall, the quality of evidence remains low and limits its usefulness to guide practice.



Full thickness rectal prolapse

(reproduced with permission of Société Nationale Française de Colo-Proctologie)

WHAT PATIENTS NEED TO KNOW

- See your doctor if you experience sensations of a lump coming out of the anus and/or associated disturbance in bowel movements
- Your doctor will examine you to check for rectal prolapse, often on a commode
- Most patients with rectal prolapse will require an operation to improve their symptoms; some patients may consider laxatives and manual reduction for initial relief
- Surgical repair may be performed through the anus (perineal) or through the abdomen (making a cut in the abdominal wall for open surgery or using a keyhole technique). There are different surgical techniques in either approach
- There is little evidence to suggest if one procedure is better than another in a particular patient. The evidence is mostly of low quality and shows similar rates of recurrence of prolapse and postoperative complications with abdominal and perineal surgery. Laparoscopic repair may have fewer complications.
- Your surgeon will discuss the different surgical options and the chances of recurrence or complications, taking into consideration your symptoms and your general fitness, as well as your preferences
- Aftercare is similar for the different procedures

EDUCATION INTO PRACTICE

- What are important considerations when discussing surgery for rectal prolapse with a patient?
- Recall a patient with a rectal prolapse that you managed at your practice. How might you alter your discussions about rectal prolapse surgery to better share the evidence and make a joint decision about the best way forward?

RECOMMENDATIONS FOR FUTURE RESEARCH

Large, multicentre, randomised trials that examine:

- The safety and efficacy of the main surgical techniques
- Long term follow-up to estimate complication rates and recurrence, which may appear after 10 years
- Use of biological meshes versus synthetic meshes for repair

GOfER diagram (Graphical Overview for Evidence Reviews)

Summarising systematic reviews and RCTs* of rectal prolapse repair techniques

INCLUDED STUDIES				FINDINGS					FIN	IDI	NG	S	EVIDENCE QUALITY	
Systematic reviews	Studies Total included participants	Procedures	0	utc	on 2	ne i 3	mea 4	ası 6	ures 6	s 7	8	Results	GRADE score	Uncertainty
Murphy ⁸ 2017	including 20 retrospective observational studies	Perineal and abdominal rectal prolapse repair. Laparoscopic and open methods	~	•		~						Short term outcomes favour laparoscopic interventions. Both abdominal and perineal repair result in resolution of symptoms and improvement in quality of life	Low ★★★★	Poor quality evidence
Emile ¹⁰ 2017	39 2647 4 RCTs*	Delorme's procedures (n=712). 5 studies added levatorplasty <i>versus</i> Altemeier's (n=1748) or PSR ¹ procedure (n=187)	•	•				*	*	*	*	Median recurrence rate Altemeier's 11.4% Delorme's 14.4% PSR ⁺ 13.9%	Low ★★★★	Poor quality evidence and marked study heterogenity
Alam ⁹ 2015	268 patients had ventral mesh rectopexy. No RCTs*, all observational	Abdominal rectopexy with mesh	•									20 patients had recurrence	Low ★★★★	Poor quality evidence
RCTs not inc	luded in reviews													
Luglio ⁷ 2017	1 140	Ventral mesh rectopexy group (A) <i>versus</i> Suture rectopexy group (B)	•	•				~	•			Median scores Costipation Preoperative <15 (A and B)	Low ★★★★	Poor quality evidence
Mäkelä- Kaikkonen ⁶ 2016	6 people had rectal prolapse alone. 10 people had rectal intussceptions	Robot assisted ventral rectopexy <i>versus</i> Laparoscopic ventral rectopexy					~					No significant difference between intervention and comparator	Very low ★★★★	Lack of evidence
 * RCT=randomised controlled trial * PSR=perineal stapled prolapse resection 1 Recurrence 2 Complications 		C) (2	3	4	6	6	7	8	* = secondary outcome * P=0	05		
		6	3 Quality of life4 Reduction of prolapse				ife of p	rola	pse	 S Resolution of constipation Bowel function (Wexner score) Resolution of faecal incontinence Mortality 				

Is ongoing research likely to provide relevant evidence?

We searched the US National Library of Medicine for ongoing trials on surgical repair of rectal prolapse. There are five ongoing trials and five completed studies awaiting publication. These include comparisons of rectopexy versus perineal procedures, endoluminal prolapse repair, and posterior and anterior repairs. Five of these studies are recruiting participants and have population sizes ranging between 10 and 50. Studies with adequate follow-up and large enough samples sizes would start to address some of the uncertainty, specifically around longer term outcomes such as recurrence rate.

What should we do in the light of the uncertainty?

The Pelvic Floor Society of the United Kingdom and Ireland⁴—a multidisciplinary collaboration between colorectal surgeons and gynaecologists—has issued guidance, and also cites advice from the American Society of Colon and Rectum Surgeons regarding rectal prolapse in their literature.¹¹ This advice for patients and doctors is available online.

Take a careful history and examination, assessing the severity of prolapse and whether it is causing the patient

discomfort and symptoms such as constipation or faecal incontinence, avoiding confusion with haemorrhoids or other anal pathologies.

Discuss the options for treatment with your patient. Conservative management may reduce discomfort temporarily but will not reverse the prolapse. Resolution of symptoms is more likely with surgery, but about a third of patients can experience recurrence and complications such as constipation and incontinence after surgery. Describe the types of procedure that might be offered and refer the patient to a multidisciplinary team of gynaecologists, colorectal surgeons, and specialist nurses who will assess the patient and discuss the appropriate surgical options to consider.

Surgeons should discuss specific differences such as the reduced postoperative constipation with bowel resection. Severity of symptoms and the patient's fitness and preferences are important considerations in deciding the appropriate treatment. For example, perineal procedures can be performed under spinal or epidural anaesthesia. Resection may be valuable if constipation is a key symptom preoperatively. Inform patients of possible complications after surgery to help make a shared decision around treatment.

Competing interests: None declared. Cite this as: *BMJ* 2019;366:I4723

Find the full version with references at http://dx.doi.org/10.1136/bmj.l4723

WHAT YOUR PATIENT IS THINKING

Addicted to eating

Our author discusses how seeing her weight problems as a result of addiction helped her to learn new ways to manage cravings



WHAT YOU NEED TO KNOW

- Problems around weight management are not always a lack of willpower or control—asking about patients' specific challenges could help provide tailored support
- Framing compulsive overeating as an addiction might help patients to find new ways of managing their weight
- For some patients who are struggling to manage their weight through standard approaches, suggesting the avoidance of some foods, rather than moderation, may be more effective

EDUCATION INTO PRACTICE

- What language do you use when talking to patients about their weight? Is this different to how you would discuss an addiction?
- What support are you aware of locally that you can offer patients who are struggling to lose weight using standard approaches or services?
- How could you ensure that patients feel supported and able to discuss their weight concerns with you?



have always struggled with my weight, even as a child. When I was aged 9 my parents started to try to help by encouraging me to go on diets, and I tried to eat less but couldn't do it. Throughout my life, the feeling of needing to eat something was overwhelming and all consuming.

I would be physically restless and mentally obsessed until I ate and satisfied the craving. When I had a full packet of biscuits, I felt safe. When the packet was empty it left me feeling remorse, guilt, and hopelessness. I would try to resist the craving, but my mind would tell me I had no option. It was an overpowering feeling—I had to eat. I tried various diets and therapies to lose weight, including cognitive behavioural therapy, hypnosis, and psychotherapy, but nothing worked.

More than willpower

Many health professionals have advised me to move more and eat less. I have been told this more times than I care to recall. As a serial dieter there was little I didn't know about calories, and the suggestion that I didn't know what to do was humiliating.

Having someone acknowledge how difficult it was might have stopped the feeling of disapproval I always felt. I thought I knew so much about nutrition and what I ought to be eating, but putting any of it into practice was more challenging. I felt ashamed and baffled. Why couldn't I remedy the situation with the knowledge and willpower I knew I had?

Attending health appointments meant fear and shame. Nobody felt worse about my weight problem than me. I worried that the health professionals would become impatient with me for not responding to the treatments and support being offered, and I often felt defensive. I wanted them to recognise that despite my best efforts the treatments were not working for me. Each time I went to see them I hoped there would be a different approach.

Certain foods set me up for a cycle of physical and mental obsession

"Sober" from overeating

I heard about Overeaters Anonymous when I was 37 from a health professional who I was seeing about my weight. Overeaters Anonymous is a 12 step programme where eating disorders are viewed in the same way as any other addiction, and the approach is to address this as a physical, emotional, and spiritual issue.

Members are fellow addictsthe support is purely from those who have had problems with food and recovered, one day at a time. Thinking about my struggles with food as an addiction helped me to understand my compulsive eating urges. I discovered that certain foods set me up for a cycle of physical and mental obsession, so for these foods, moderation was not the keythe only way to avoid this cycle was to not eat these foods. The programme also used language similar to that when dealing with other addictions, including the term sobriety. This helped me picture the clear headedness that was possible from the utter chaos I was experiencing around my eating.

I have now been "sober" for over 11 years and maintained a weight loss of 8 stone. As with any addiction, however, I know it will always be there. It has taken a lot of hard work, but Overeaters Anonymous has enabled me to manage my food obsession by working the 12 steps; not just "white knuckling" through it. The compulsion I faced daily has gone and I no longer have to resist temptation at every turn. My obsession has been lifted. For now, I am at peace around food.

Anonymous

Competing interests: None declared. The Overeaters Anonymous website can be found at www.oagb.org.uk.

Cite this as: BMJ 2019;366:14776

answers



Articles with a "learning module" logo have a linked BMJ Learning module at http://learning.bmj.com.

CASE REVIEW

Managing a patient with pain and facial swelling

Sizongaib adt zi tadW 1

is seen, consider the possibility of a second fracture (~44% are bilateral). temporomandibular joint stabilising at either end; therefore, if a fracture mandible. The mandible can be considered as a ring of bone with the Fracture of the right para-symphysis and left condyle of the

2 What signs may be related to this diagnosis?

.sumsift bns, and trismus. Signs include tooth mobility, intra-oral laceration, bleeding, sublingual

paraesthesia of the chin and lower lip may occur as a result of interior mandible, which can appear as though a tooth is missing. Pain and normal alignment (malocclusion). There may be a step deformity in the Patients may also complain of jaw pain and that their bite is out of

.9δ6៣6b θνηθη το μαραία.

3 How would you manage this initially?

pantomogram and a posteroanterior mandible radiograph (fig 2). Follow the advanced trauma life support protocol. Then request a dental

.coitoidifne bacient and prescribe analgesia and antibiotics.

radiograph to assess tracture reduction. They are advised to eat a soft discharged with analgesia the day after surgery following a postoperative quality of life through better return of function. Patients are routinely Early reduction and fixation will improve a patient's outcome and Refer to the maxillotacial surgeon on call.

diet, avoid contact sports, and maintain good oral hygiene until clinical

review. Mandibular fractures heal completely over three months.

http://bit.ly/29HCBAL and submit online at http://bit.ly/29vyGSx

LEARNING POINT

fracture

.2% of mandible fractures.

Sulbuloni, esusim esnetadu e

alcohol, has been linked to up to

airows show left condyle tracture and right parasymphysis

Fig 2 Posteroanterior radiograph of the mandible. Red

You can record CPD points for reading any article.

We suggest half an hour to read and reflect on each.

If you would like to write a Case Review or Spot Diagnosis for Endgames, please see our author guidelines at

and Stephen L Ball Patient consent obtained.

1 What is the diagnosis?

Cite this as: BMJ 2019;366:l4519

Submitted by Rory Houston, Sarah L Ball, James Adams,

3 How would you manage this initially?

2 What signs may be related to this diagnosis?

side of his face. He was intoxicated and unable to provide a clear history, but he mentioned an argument in the pub. A radiograph of the area was requested (fig 1).

Managing a patient with pain and facial swelling

A 32 year old man presented to the emergency department with trismus and a painful swollen right

ENDGAMES









MINERVA

Ocular erythema nodosum

A 9 year old boy presented with a sudden onset atraumatic painful purplish red indurated swelling around the eyes (figure). Physical examination showed a few areas of tender erythema of up to 4 cm in diameter on the lower legs. Biopsy specimens obtained from the eyelid and pretibial erythema revealed septal panniculitis. His medication history, a throat swab for bacterial culture, a chest radiograph, and a laboratory investigation were normal, except for serum C reactive protein concentration (2.99 mg/dL, normal range <0.3). Idiopathic erythema nodosum was diagnosed. All lesions spontaneously resolved within two weeks.

The incidence of erythema nodosum is 1-5 in 100 000 population per year. Although half

of cases are idiopathic, erythema nodosum may be associated with streptococcal infection, tuberculosis, medications, inflammatory bowel diseases, sarcoidosis, rheumatological disease, malignancy, and pregnancy. Lesions are mainly localised to the lower legs, but can occur at any site, including the eyelids. Besides clinical features, histological confirmation of septal panniculitis is necessary for diagnosis of erythema nodosum.

Shota Takashima; Mitsuhito Ota (ota@med.hokudai.ac.jp), Department of Dermatology, Chitose City Hospital, Chitose, Japan Patient consent obtained.

Cite this as: BMJ 2019;366:l4899

If you would like to write a Minerva picture case, please see our author guidelines at http://bit.ly/29HCBAL and submit online at http://bit.ly/29yyGSx

Gun laws

After vehicle crashes. firearms-related injury is the leading cause of death among children in the US. Twice as many children die from firearms than do from childhood cancers. An ecological study makes the unsurprising discovery that, in states which require background checks on people who wish to purchase guns or ammunition, childhood mortality rates from firearms are substantially lower than those in states where gun control is less strict, even after rates of gun ownership are taken into account (Pediatrics).

Mediterranean diet

The retraction and republication of the PREDIMED trial last year left many wondering whether a Mediterranean diet was really the panacea that it once seemed. Another large trial, this time in pregnant women with metabolic risk factors such as obesity, hypertension, and hypertriglyceridaemia, adds to the doubts (PLoS Med). Participants were randomised either to an intervention that promoted a diet high in fruits, vegetables, nuts, and olive oil and low in red meat, or to usual care. Adverse pregnancy outcomes for both mothers and offspring were as common in those allocated to this Mediterranean style diet as they were in the group receiving usual care.



Cholesterol lowering in older adults

Last year, The BMJ published a large retrospective study reporting that statins had no benefits for people over 75 years old, as far as the primary prevention of cardiovascular disease was concerned. However, a database study from France suggests that, once started, statins shouldn't be stopped (Eur Heart J). In 120000 people aged 75 who had been prescribed one of these drugs for primary prevention, rates of hospital admission for a cardiovascular event were 30% higher in those who had discontinued statins. Unfortunately, the investigators had no information on why statins were discontinued.

Deprescribing for patients with a terminal illness

On the subject of stopping treatment, a record linkage study from Sweden finds that many patients with advanced cancer are treated with preventive drugs long after they could derive any possible benefit (*Cancer*). Two thirds of patients, for example, were still taking antihypertensive drugs in the final month of life, and much the same was true for statins and antiplatelet agents. Apart from the pointless expense, cutting the number of medications reduces both harms from adverse effects and the burden of having to take so many pills.



haematocrit

The Copenhagen General Population Study measured platelet counts and haematocrits in more than 100000 adults and followed them for eight years. People with high platelet counts had almost double the risk of stroke, and people with high haematocrit values had a 50% increased risk of coronary thrombosis compared with those whose values for these variables were in the middle of the distribution (J Thromb Haemost). Excluding people who were later discovered to have myeloproliferative disorders didn't affect the findings. As the investigators point out, there's something of a paradox here, since people with a high risk of stroke are commonly treated with anticoagulants whereas people at risk of coronary artery events are usually given antiplatelet drugs. Cite this as: BMJ 2019;366:15148

