education

ART OF MEDICINE

Doctor, interrupted

Doctors sometimes feel aggrieved at the seemingly incessant interruptions from the pager, but they should take solace in the knowledge that they are not alone among hospital staff. Our analysis of paging activity over a two week period in a London teaching hospital showed that, of the 37 865 pager requests (2577/day), doctors featured only twice in the top 10 most paged numbers, in positions eight and 10. The general porter was in first place, followed by the theatre coordinator in second, and the specimens porter in third. Clinical managers dominated the chart, with the adult bed manager in fourth position, the nurse site manager in fifth, and the paediatric bed manager in ninth. In a lowly eighth place came the general surgical on call senior house officer (SHO), who received less than a third of the pages clocked up by first place, and only slightly more than the vascular SHO in 10th place. The nurse in charge of the acute medical beds came sixth, with the haematology laboratory technician seventh. The medical registrar narrowly missed the top 10, featuring 11th in the list.

Notwithstanding the variation in the nature of pager requests, this is a humbling reminder that doctors do not have a monopoly on the harassment wreaked by the hospital pager. Nor, presumably, on the subsequent curt telephone responses.

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We welcome contributions to this column via our online editorial office: https://mc.manuscriptcentral.com/bmj

CLINICAL UPDATES

Controlled drugs: safe use and management

Documentation and communication are key to safe use of controlled drugs according to new NICE guidance. When starting controlled drugs clinicians should document the indication and regimen clearly in the patient's notes. A clear plan should be in place to review and monitor treatment, and it should be communicated to all healthcare professionals involved in the patient's care. The patient's GP should be told of any changes in prescription of these drugs.

http://bit.ly/1VZ4vbh

Antimicrobial stewardship

In 2014, 74% of antimicrobial prescribing was in general practice, 11% and 7% were for hospital inpatients and outpatients, respectively, 5% for dental practice patients, and 3% in other community settings says NICE. Primary care prescribers should give patients with self limiting illnesses advice about self management and the adverse effects of antimicrobial overuse. If primary care prescribers are unsure whether an illness is self limiting, they can use back-up (delayed) prescribing, which encourages self management but allows patients to access antibiotics without another appointment if their condition worsens.

http://bit.ly/24tkCUX

Sublingual sufentanil for postoperative pain

In the postoperative period, 60% of people experience severe pain. With a lack of clear national guidance on postoperative pain management, practice has varied across trusts. New evidence from NICE suggests that the sufentanil (a synthetic opioid) sublingual tablet system is comparable to patient controlled intravenous morphine analgesia as assessed by patients and nurses. According to the European Medicines Agency, the sublingual route avoids handling and dosing errors associated with intravenous administration and may improve compliance with physiotherapy.

http://bit.ly/1rrZexD

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FAST FACT—MENINGITIS IN ADULTS

Chemoprophylaxis with ciprofloxacin or rifampicin is recommended to prevent meningococcal meningitis in people who have been in close prolonged contact with an infected person. The aim is to eradicate throat carriage. Most (97%) cases of meningococcal disease are sporadic and risk to contacts is therefore low.

For more information visit BMJ Learning (http://www.ow.ly/YNfl8).

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BMJ Learning

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GUIDELINES

Supporting young people in their transition to adults' services: summary of NICE guidance

Swaran P Singh,[1 2] Beth Anderson,[3] Kristin Liabo,[4] Thines Ganeshamoorthy,[5] on behalf of the guideline committee

WHAT YOU NEED TO KNOW

- Allocate a named transition worker, which is a role not a job title; this should be someone who is involved in the young person's care
- Develop a transition plan with the young person that describes what care will be provided and by whom
- Develop a personal folder, held by the young person, describing their preferences, care needs, and history
- Offer support for a minimum of six months before and after transfer
- Education and employment, community inclusion, health and wellbeing, and independent living should all be addressed

In spite of a wealth of guidance,[1] young people making the transition from children's to adults' services are often inadequately or inconsistently supported.[2-4] This can lead to disrupted care.[5] It can also mean they disengage from services, which can be costly, both for them and for care providers.

Transition is a process and should not be conflated with transfer, which is a discrete event. Simple transfer may result in poor understanding of the young person's treatment needs by the new adult team. Healthcare transition is a gradual, purposeful, and goal oriented process. It can be difficult and often coincides with other transitions such as development into adulthood, which adds complexity. Transition should start well before transfer and enable patients to understand the service changes they can expect. See linked infographic on supporting young people in their transition to adults' services.

We summarise the most recent recommendations from the National Institute for Health and Care Excellence (NICE) aimed at improving the transition process and outcomes across health and social care.[6]

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Further information about the guidance, a list of members of the Guideline Development Group, and the supporting evidence statements are in the full version on thebmj.com.

Recommendations

NICE recommendations are based on systematic reviews of best available evidence and explicit consideration of cost effectiveness. When minimal evidence is available, recommendations are based on the guideline committee's experience and expert opinion of what constitutes good practice. Evidence levels for the recommendations are in the full version of this article on bmj.com.

The guideline was founded on strong evidence about what young people want from services, and what they think would help practitioners work together effectively. This summary focuses on a subset of the guideline recommendations. It offers practical advice to clinicians on ways to improve young people's engagement with services. It also describes what clinicians and others can do to coordinate transition support.

Principles

- Offer transition support to:
  - Focus on what is positive and possible for the young person rather than on a predetermined set of transition options
  - Identify the support available to the young person, which includes but is not limited to family or carers.
- Involve young people and carers in service design, delivery, and evaluation related to transition by:
  - Co-producing transition policies and strategies with them
  - Planning (box 1), co-producing, and piloting materials and tools
  - Asking them if the services helped them achieve agreed outcomes
  - Feeding back to them about the effect their involvement has had.

Allocate a named worker

- Help the young person to identify a single practitioner, who should act as a "named worker," to coordinate care and support during transition. This person could be supported by an administrator.
- The named worker should be someone with whom the young person has a meaningful relationship and, depending on the young person's needs, this person could be:
  - A nurse, youth worker, or other health, social care, or education practitioner
  - The named GP
  - An existing key worker, transition worker, or personal adviser.

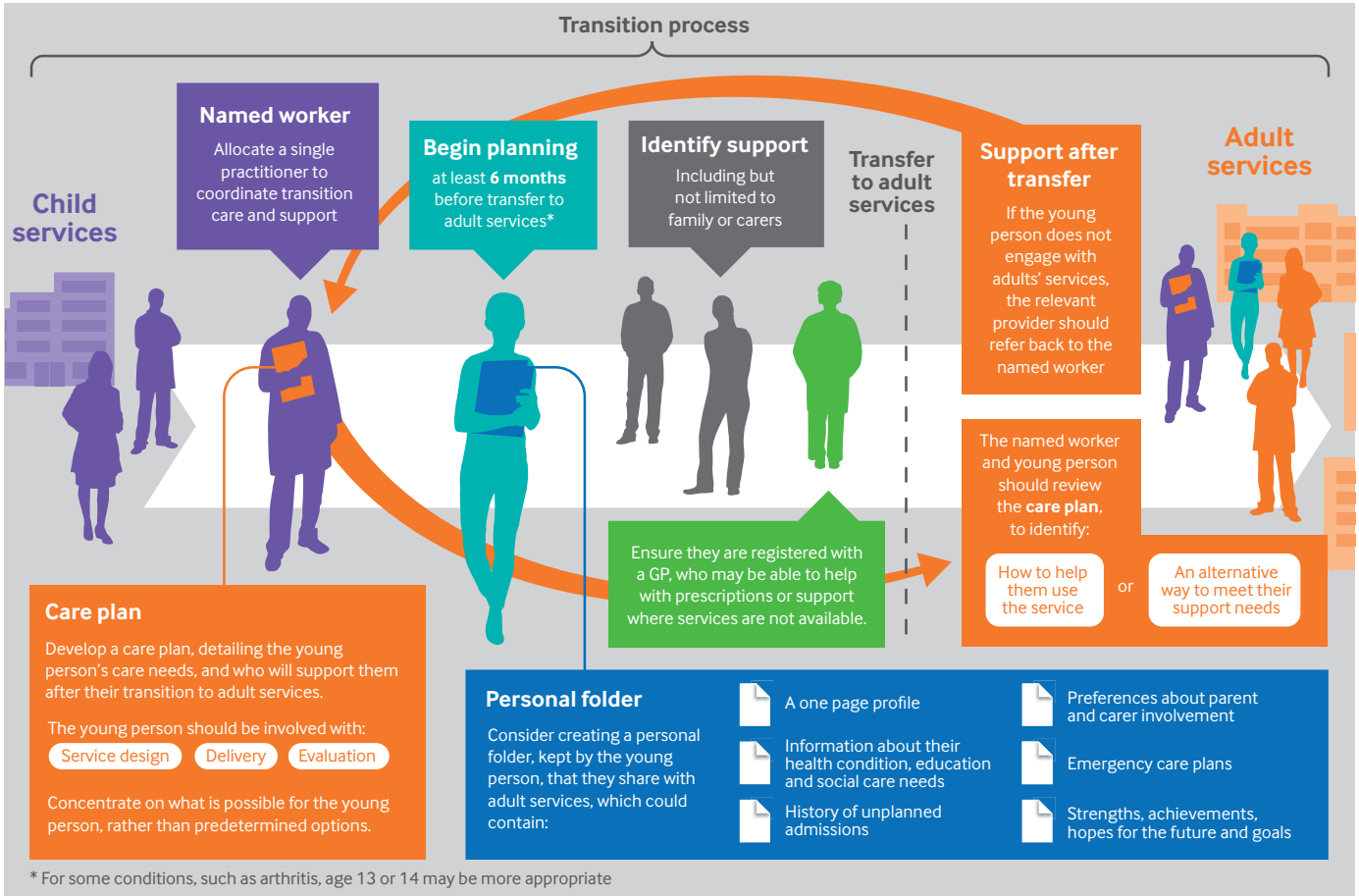
HOW YOUNG PEOPLE WERE INVOLVED IN THE CREATION OF THIS ARTICLE

- The guideline scope was informed by consultation with two groups of young people with experience of transition
- Three young people with experience of transition were appointed as full members of the guideline committee for this topic
- The review protocol included a research question on young people's views and experiences. Qualitative studies of people's views and experiences were also considered in relation to all other research questions
- Thines Ganeshamoorthy was one of the young people on the committee and is co-author of this article

Box 1 | Timing and review

- Ensure the point of transfer is not based on a rigid age threshold
- To be able to plan appropriately, use existing information technology systems to identify young people (≤25 years) in transition
- Meet to review transition planning annually or more often if needed*
- Produce the young person's personal folder early enough to inform discussion—for example, three months before transfer

*For young people with a child in need plan, an EHC (education, health, and care) plan, or a care and support plan, local authorities must carry out a review as set out in the Children Act 1989, the Children and Families Act 2014, and the Care Act 2014.



- Named workers should:
  - Oversee, coordinate, or deliver transition support, depending on the nature of their role
  - Be the link between the young person and the various practitioners involved in support, including the named GP
  - Arrange appointments with the GP where needed as part of transition
  - Help young people navigate services, bearing in mind that many may be using a complex mix of care and support
  - Support the young person's family, if appropriate
  - Ensure that a young person who is also a carer can access support
  - Act as a representative for the young person, if needed (provide support or advocate for the young person if needed)
  - Proactively engage primary care in transition planning
  - Direct the young person to other sources of support and advice, such as peer advocacy support groups provided by voluntary and community sector services
  - Think about ways to help the young person travel to appointments, if needed
  - Provide advice and information.

Support before transfer

The following guideline recommendations relate to all children using health or social care services.

Begin planning for adulthood from aged 13 or 14 at the latest (box 1). Transition planning should be developmentally appropriate, taking into account each young person's capabilities and needs.

- Consider working with the young person to create a personal folder that he or she can keep and share with adults' services. This should be in the young person's preferred format. It should be produced early enough to form part of discussions about planning transition before transfer). It could contain:
  - A one page profile
  - Information about the young person's health condition, education, and social care needs
  - Preferences about parent and carer involvement
  - Emergency care plans
  - History of unplanned admissions
  - The young person's strengths, achievements, hopes for the future, and life goals.

Support after transfer (box 2)

The following recommendations seek to ensure that the overall plan for supporting a young person is revised if the young person is not in contact with services after transfer.

Box 2 | Recommendations for follow-up

- Follow up young people who do not attend meetings or appointments by contacting them (and their family, if appropriate) or their GP
- Refer back to the named worker for follow-up of young people who do not engage with adult services after assessment
- Where there is no adult service to refer to, send a detailed discharge letter to the GP and give the young person information about other sources of help

GUIDELINES INTO PRACTICE

- Do you check the young person is registered and engaging with a GP?
- Does a clinician from the relevant adult service(s) meet the young person before transfer?
- Does the young person see the same clinician from the adults' team for the first two appointments after transfer?

- If, after assessment, the young person does not engage with health and social care services, the relevant provider should refer back to the named worker with clear guidance on re-referral (if applicable).
- If a young person does not engage with adults' services and has been referred back to the named worker, the named worker should review the person centred transition plan with the young person to identify:
  - How to help the young person use the service, or
  - An alternative way to meet the young person's support needs.

Implementation

The lack of incentive for children's and adults' services to work together and the different funding streams are the greatest barriers to effective transition. As a result of this, transition (rather than transfer) is often initiated by individual practitioners rather than being an integral part of the care pathway. Adults' and children's services need to share responsibility for supporting transitions. To help this, a practitioner from the relevant adult service(s) should offer to meet the young person before transfer. This could happen through adult services' clinicians being seconded to work on children's teams (or vice versa), or through joint appointments, joint clinics, or practitioners paired to work together.

Clinicians and managers should review local policy and practices to ensure that they support a gradual and person focused transition. This could include policies on consulting alone to ensure young people have the opportunity to discuss their care separately from their parents. It could also include a review of policies on admissions and discharge, and managing non-attendance.

It is particularly difficult to support transition when no equivalent adult service is available or when eligibility thresholds are different. The process can be made easier by adults' and children's clinicians undertaking a joint review of service provision to establish protocols outlining what to do in such circumstances, and engaging clinicians and commissioners to plan ways to fund service gaps.

See infographic for a summary of supporting young people in their transition to adults' services.

Competing interests: See thebmj.com for conflicts of interest based on NICE's policy.

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CLINICAL REVIEW

Barrett's oesophagus

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This is an edited version of the clinical review, full version is on thebmj.com

CPD/CME
1 CREDIT

HOW PATIENTS WERE INVOLVED IN THE CREATION OF THE ARTICLE
This article predates our patient partnership initiative, so patient involvement was not requested.

WHAT YOU NEED TO KNOW

- Barrett's oesophagus is the asymptomatic replacement of normal squamous epithelium of oesophagus by metaplastic columnar epithelium
- It is a precursor for oesophageal adenocarcinoma
- Gastro-oesophageal reflux disease (GORD) is strongest risk factor known
- For non-dysplastic Barrett's oesophagus with intestinal metaplasia or any Barrett's oesophagus >3 cm in length, treat GORD symptoms and perform endoscopic surveillance every 3-5 years
- If dysplasia or neoplasia is confirmed on endoscopy, treatment options include endoscopic mucosal resection or radiofrequency ablation

Barrett's oesophagus is a premalignant condition where the oesophageal squamous epithelium undergoes columnar change with metaplasia, which predisposes to the development of oesophageal adenocarcinoma. Many patients with Barrett's oesophagus have no symptoms. Development of oesophageal adenocarcinoma is understood to progress in a stepwise manner following the sequence of oesophagitis, metaplasia, dysplasia, and finally adenocarcinoma (fig 2).

Who is at risk?

Barrett's oesophagus is associated with chronic GORD, hiatus hernia, smoking, and central obesity.[3 4] Alcohol does not seem to be an independent risk factor for Barrett's oesophagus.[5] It is seven times more common in males, especially over the age of 50 years, and is thought to have an inherited predisposition.[6] Male sex and being overweight are also associated with increasing risk of progression of Barrett's oesophagus to cancer.[7]

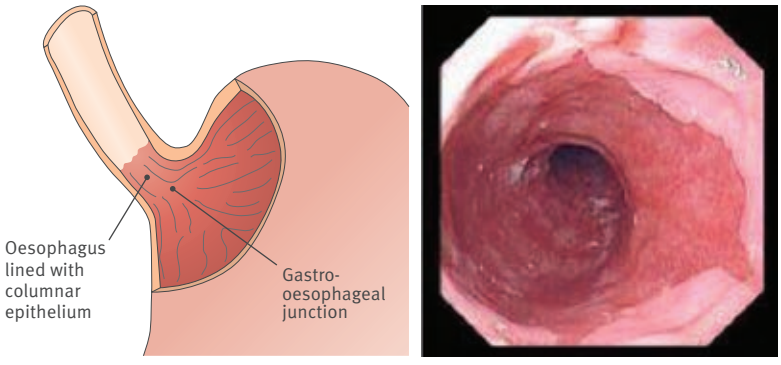

Fig 1 | Endoscopic view and diagram of Barrett's oesophagus

Should we screen for Barrett's oesophagus?

Endoscopic screening in the general population is not currently recommended.[8] Screening for Barrett's oesophagus can be considered in patients with chronic GORD symptoms and two or more of the above risk factors. If there is a family history with at least one first degree relative with Barrett's oesophagus or oesophageal adenocarcinoma, the threshold for screening should be lowered.[8] Currently most cases of Barrett's oesophagus are identified when patients undergo endoscopy for evaluation of upper gastrointestinal symptoms such as GORD or dyspepsia.

How to screen for Barrett's oesophagus?

Clinically, Barrett's oesophagus is diagnosed when salmon coloured columnar epithelium is clearly visualised to extend above the gastro-oesophageal junction during endoscopy (fig 1). Standard endoscopic biopsies according to the Seattle protocol[9] (that is, four quadrant biopsies per 2 cm length of Barrett's oesophagus) in addition to targeted biopsies of any visible lesion are recommended for screening for Barrett's oesophagus.[8-11] Unsedated trans-nasal endoscopy has similar sensitivity and specificity to those of traditional endoscopy and can be considered as an alternative screening method, but the image quality is insufficient for ongoing surveillance once Barrett's oesophagus is diagnosed.[11] The diagnosis is confirmed when histopathological examination shows specialised columnar epithelium or intestinal metaplasia. Longer Barrett's oesophagus segments are associated with increased risk of progression to oesophageal adenocarcinoma.[12]

What happens after Barrett's oesophagus is diagnosed?

After diagnosis, clinicians need to address the following issues with patients:

- Symptom control of GORD with non-pharmacological and pharmacological measures
- Long term endoscopic surveillance to detect progression to dysplasia and oesophageal adenocarcinoma
- Determine whether endoscopic treatment is required among patients with confirmed dysplasia.

What surveillance measures are recommended after diagnosis?

The risk of progression to cancer is vastly different among patients with non-dysplastic Barrett's

WHO SHOULD BE SCREENED FOR BARRETT'S OESOPHAGUS?

People with chronic or severe GORD (duration >5 years or at least twice weekly symptoms or symptoms interfering with daily activity)

And at least three of:

- Age >50 years
- Male sex
- White race
- Obese
- Smoking

Or

- Family history of Barrett's oesophagus or oesophageal adenocarcinoma

There is no evidence that alcohol consumption is associated with risk of Barrett's oesophagus

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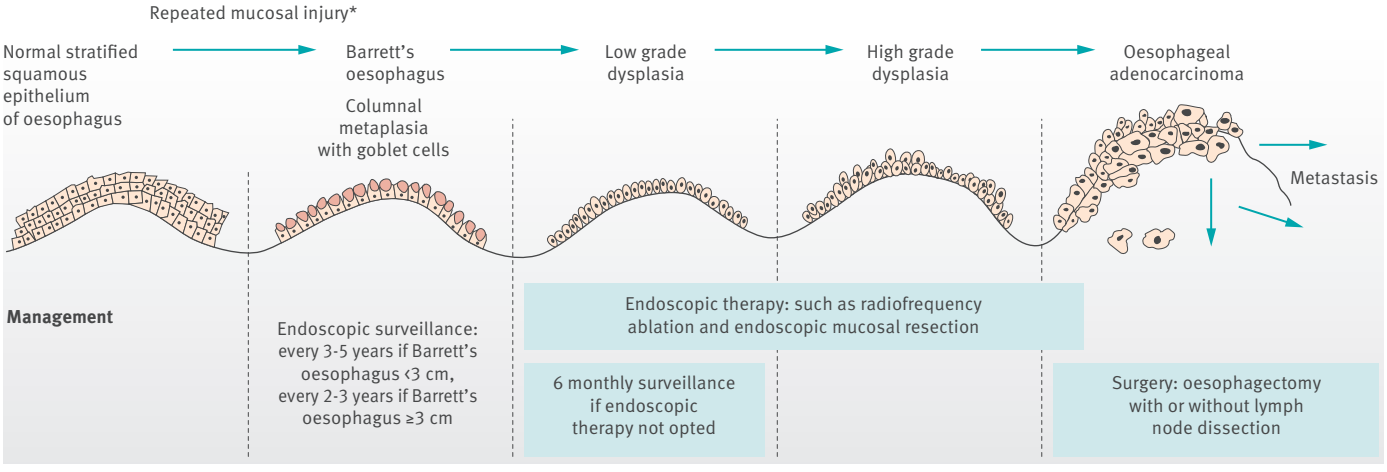
oesophagus versus those with dysplasia. Recent studies estimate that the risk of progression to oesophageal adenocarcinoma among patients with non-dysplastic Barrett's oesophagus is approximately 0.33% per annum, compared with about 10% per annum in patients with high grade dysplasia.[13 14] In patients with Barrett's oesophagus with intestinal metaplasia but no dysplasia, surveillance is recommended every 3-5 years; for low grade dysplasia and high grade dysplasia, intervention is recommended. For patients who decline ablative therapies, subsequent surveillance is recommended to be done 6-12 months later.[8-15] Surveillance is not recommended if life expectancy is less than five years.[16]

Table 1 summarises the guidelines for surveillance by different gastroenterology societies.

Can patients ever exit from surveillance?

For patients with short segment (<3 cm) Barrett's oesophagus without intestinal metaplasia that has been identified and confirmed on two separate endoscopies, discharge from surveillance is encouraged.[8] For patients with Barrett's oesophagus with intestinal metaplasia, the current recommendation is that surveillance continues long term.[11] This recommendation may change in the future because of several factors. The risk of progression to oesophageal adenocarcinoma from non-dysplastic Barrett's oesophagus seems to be much lower than previously suggested by smaller studies.



*Risk factors: chronic GORD, obesity, hiatus hernia, male, smoking

Fig 2 | Diagram of progression of Barrett's oesophagus from normal oesophageal epithelium to oesophageal adenocarcinoma

Table 1 | Guidelines for surveillance of Barrett's oesophagus by different gastroenterology societies

Disease stage	British Society of Gastroenterology (2013, 2015)[8]	American College of Gastroenterology (2015)[11]	American Society of Gastrointestinal Endoscopy (2012)[15]	American Gastroenterology Association (2011)[10]
Non-dysplastic Barrett's oesophagus	Barrett's oesophagus <3 cm with intestinal metaplasia: surveillance endoscopy every 3-5 years Barrett's oesophagus ≥3 cm: surveillance every 2-3 years	Surveillance endoscopy every 3-5 years	No surveillance can be considered If surveillance is elected: surveillance endoscopy every 3-5 years with 4-quadrant biopsies every 2 cm	Surveillance endoscopy every 3-5 years
Barrett's oesophagus indeterminate for dysplasia	Review by second GI pathologist- p53 immunostain in addition to histopathological assessment Optimisation of antireflux medication, repeat endoscopy in 6 months If no definite dysplasia found, surveillance as for non-dysplastic Barrett's oesophagus	Review by second pathologist preferably GI pathologist Repeat endoscopy after optimisation of acid suppression for 3-6 months If Barrett's oesophagus indeterminate for dysplasia is found again, repeat exam-surveillance after 12 months	Review by second pathologist Increase antisecretory therapy Repeat endoscopy and biopsy to clarify dysplasia status Consider endoscopic ablation in select cases	—
Low grade dysplasia	p53 immunostain Repeat endoscopy in 6 months If low grade dysplasia is found again and confirmed by expert GI pathologist, offer endoscopic therapy If endoscopy therapy declined, surveillance every 6 months	Review by second pathologist preferably GI pathologist Endoscopic therapy preferred or surveillance every 12 months Follow-up every year until no dysplasia seen on two consecutive endoscopies	Confirm with expert GI pathologist Repeat endoscopy in 6 months to confirm low grade dysplasia Surveillance endoscopy every year with 4-quadrant biopsies every 1-2 cm Consider endoscopic resection or ablation	Confirm with expert pathologist Surveillance endoscopy every 6-12 months Consider endoscopic eradication therapy
High grade dysplasia or intramucosal carcinoma	Endoscopic therapy preferred over oesophagectomy or endoscopic surveillance Endoscopic mucosal resection recommended as most accurate staging intervention EMR is therapy of choice if visible mucosal irregularities If oesophagectomy elected, post- surgery surveillance on a symptomatic basis	Review by second pathologist preferably GI pathologist If mucosal irregularity present, do EMR Endoscopic therapy recommended	Confirm with expert GI pathologist Consider endoscopic resection or RFA EUS for local staging and lymphadenopathy Consider surgical consultation Surveillance endoscopy every 3 months in select patients, 4-quadrant biopsies every 1 cm	Confirm with expert pathologist If mucosal irregularity present, do EMR Endoscopic eradication preferred over surveillance or surgery If treatment not elected, surveillance every 3 months

GI = gastrointestinal. EMR = endoscopic mucosal resection. RFA = radiofrequency ablation. EUS = endoscopic ultrasound

Current estimates from a meta-analysis of 11 434 patients suggest that, for every 1000 people with non-dysplastic Barrett's oesophagus, only three new cases of oesophageal adenocarcinoma will develop each year.[19] Furthermore, the incidence is reduced to 1.9 cases per 1000 persons per year if the patients have short segment non-dysplastic Barrett's oesophagus.[19] Another study, which included 3515 patients, suggested that, if two or more follow-up endoscopies confirm non-dysplastic Barrett's oesophagus, the subsequent risk of developing oesophageal adenocarcinoma becomes diminutive.[20] Surveillance guidelines may change as the ability to identify those at particularly low risk of progressing to oesophageal adenocarcinoma evolves.

Who needs endoscopic eradication therapy?

Endoscopic eradication therapy is recommended over continued surveillance if any grade of dysplasia is present.

Endoscopic therapy can be divided into two main types:

- Tissue acquiring—such as endoscopic mucosal resection and endoscopic submucosal dissection
- Non-tissue acquiring or ablative therapies—such as radiofrequency ablation, photodynamic therapy, cryotherapy, and argon plasma coagulation.

Table 2 summarises the efficacy, durability, and complications of the most common endoscopic treatments for Barrett's oesophagus.

Endoscopic mucosal resection

Endoscopic mucosal resection is a minimally invasive technique used for resection of flat and nodular lesions in Barrett's oesophagus and early oesophageal adenocarcinoma that is limited to the mucosa. As well as being therapeutic, endoscopic mucosal resection can be used to stage early cancer accurately and provide guidance for further therapy. Endoscopic mucosal resection has comparable eradication rates and lower complications compared with oesophagectomy.[24 29] Although the procedure is safe overall, it can cause strictures, with the risk being proportional to the amount of tissue removed. The risk is particularly high if circumferential segments of Barrett's oesophagus are removed.[30] Practitioners often use endoscopic mucosal resection to remove nodular areas of Barrett's oesophagus and deal with the remaining flat Barrett's oesophagus tissue with ablation techniques.

Radiofrequency ablation

Radiofrequency ablation is the preferred endoscopic ablative therapy in patients with flat dysplasia or intramucosal carcinoma.[31] This technique uses an electrode that delivers high frequency energy to destroy the superficial lining of the oesophagus. It can be used for either circumferential or focal tissue destruction and has minimal complications. Apart from short lived post-procedural chest pain, the most common long term complication is oesophageal strictures, which are responsive to dilation.[21]

Radiofrequency ablation is an effective and durable therapy.[22 23] A meta-analysis that examined its efficacy and durability ablation showed that 91% of patients achieved complete eradication of dysplasia, and progression to high grade dysplasia or oesophageal adenocarcinoma occurred in only 0.7% of the patients

Table 2 | Efficacy, durability, and complications of the most common endoscopic treatments for Barrett's oesophagus

	Radiofrequency ablation with or without EMR[21-23]	Endoscopic mucosal resection[24]	Cryotherapy*[25 26]	Oesophagectomy[27 28]
Initial eradication of high grade dysplasia	90-95%	90%	100%	—
Initial CRIM	70-86%	90%	100%	97-100%
Recurrence of non-dysplastic Barrett's oesophagus	13-33% at 2-3 years	39.5% at 5 years	19% at 36 months*	—
Recurrence of dysplasia or cancer	1.6-11% at 1.5-2.5 years	6.2% at 5 years	3% at 36 months	—
Adverse events	Stricture 4-11.9%	Stricture 47% (widespread EMR)	Stricture 9%	Death 1.2%

EMR=endoscopic mucosal resection. CRIM=complete remission of intestinal metaplasia.
*19% developed recurrent high grade dysplasia but were successfully re-treated, and 37.5% required touch-up treatment after initial eradication.

after complete eradication was achieved.[21] However, when patients with complete eradication of high grade dysplasia or intramucosal carcinoma were followed over a five year period, recurrence rates were 8% and 9.5% for high grade dysplasia and intramucosal carcinoma respectively.[32] Radiofrequency ablation is found to be safe even after previous endoscopic mucosal resection and is recommended for flat dysplasia limited to the mucosa.[33]

Cryotherapy

This involves application of liquid carbon dioxide or nitrogen to the affected dysplastic mucosa.[25] The ensuing tissue injury heals with formation of neosquamous epithelium. A multicentre retrospective study of patients with high grade dysplasia showed that cryotherapy completely eradicated the dysplasia in 97% of patients and was durable at two years' follow-up.[34] Complications of cryotherapy include dysphagia, strictures, and chest pain (table 2).[25] Cryotherapy is currently being evaluated in prospective clinical trials and is used in some centres for patients in whom radiofrequency ablation has failed.[26]

What is the role of surgery in management of Barrett's oesophagus?

Oesophagectomy used to be the conventional treatment for early neoplasia of the oesophagus. However, its use has been superseded by endoscopic techniques unless neoplasia involves the submucosa or beyond, or when endoscopic therapies have failed. Preference for endoscopic therapy is based on the rationale that these therapies are effective and safer than oesophagectomy. Given that the prevalence of lymph node involvement in cases of high grade dysplasia is estimated to be 1-2%,[36] whereas mortality associated with oesophagectomy is 1.2%, endoscopic therapies are recommended in this setting.[27 37] When neoplasia invades the submucosa, the risk of lymph node positivity is considerably increased, making oesophagectomy with lymph node resection the only possible curative treatment.[28 38]

Should surveillance continue after successful endoscopic therapy?

Continued surveillance with high resolution white light endoscopy is recommended after successful endoscopic therapy in order to detect recurrence of intestinal metaplasia or dysplasia. After complete eradication of high grade dysplasia or intramucosal carcinoma, surveillance should be conducted every three months for the first year, every six months in the second year, and every 12 months thereafter, as recurrence occurs in about 1 in 10 of cases within five years of therapy.[11 39] In those who had low grade dysplasia before eradication therapy, surveillance should be done every six months for the first year and annually thereafter.[11]

Can we prevent progression of Barrett's oesophagus with medicines?

The recent ACG Clinical Guideline recommends once-daily treatment with a proton pump inhibitor (PPI) for all patients with Barrett's oesophagus.[11] This is based on several cohort studies that suggest that the risk of progression of Barrett's oesophagus to cancer is reduced among patients taking maintenance PPI therapy.[11] Other drugs that may decrease the risk of progression to oesophageal adenocarcinoma include non-steroidal anti-inflammatory drugs, aspirin, metformin, and statins. Observational studies of the role of these drugs have produced conflicting results,[40 41] and there are no published randomised trials on the subject. Thus, currently the risk versus benefit of treatment is not defined, and routine use of these drugs is not recommended. Results from the ASPECT study (NCT00357682) are awaited to understand the role of PPI dosing and aspirin in non-dysplastic Barrett's oesophagus.

How should reflux symptoms be managed in patients with Barrett's oesophagus?

Recurrent or severe GORD is an independent risk factor not only for Barrett's oesophagus but also for oesophageal adenocarcinoma. Optimising management of reflux symptoms has symptomatic as well as preventive benefits. Currently, PPIs are recommended in all cases of Barrett's oesophagus irrespective of symptoms.[11] As with all patients with GORD, lifestyle modifications, including weight loss and bed head elevation, are key.[42] In the case of young patients who require high doses of PPI to control symptoms and are likely to be taking PPI life long, discuss referral to a specialist for consideration of antireflux surgery. However, antireflux surgery may make Barrett's oesophagus surveillance more difficult because of the postoperative anatomy.[11 43]

Competing interests: None declared.
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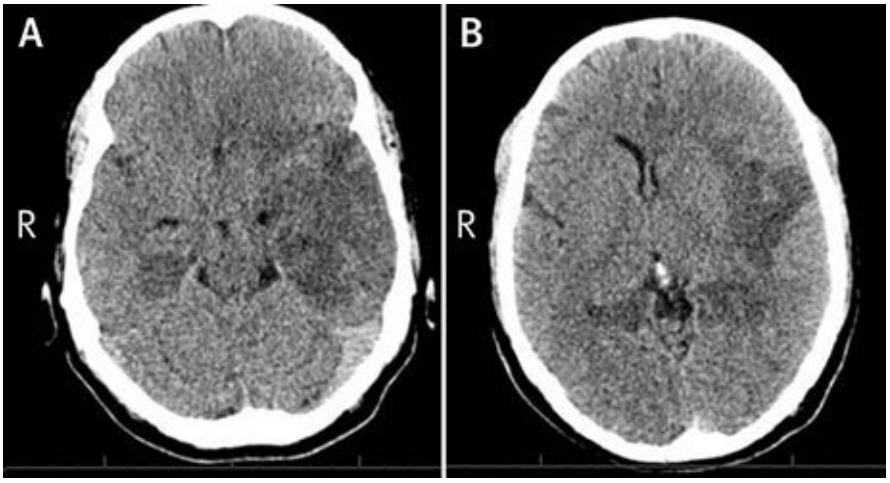
Find this at: http://dx.doi.org/10.1136/bmj.i2373

CASE REVIEW **Fever with seizure and confusion**

A 41 year old previously healthy man presented with a six day history of fever, headache, and vomiting, followed by two episodes of staring spells and unresponsiveness and secondarily generalised tonic-clonic seizures. In the emergency department he was restless, inattentive, and not oriented to time, place, and person (Glasgow coma score 10/15; best eye opening response (E): 3; best motor response (M): 5; and best verbal response (V):2).

He had neck stiffness; Kernig's sign was positive; and his ocular fundi were normal. He had no limb weakness or ataxia and deep tendon reflexes and plantar reflexes were normal. He tested negative for HIV1/2 antigen and antibody. His blood coagulation profile and platelet count were normal.

An initial unenhanced computed tomogram of the brain found no contraindications for lumbar puncture. Analysis of cerebral spinal fluid (CSF) showed glucose 3.4 mmol/L (reference range 2.2-3.9 mmol/L; corresponding blood glucose was 5.8 mmol/L), protein 2.59 g/L (0.15-0.45 g/L), 450×10^6 white blood cells/L (100% lymphocytes; 0-5×10^6), and 40×10^6 red blood cells/L. Gram staining of the CSF was negative and bacterial culture was sterile. A confirmatory microbiological test was performed on his CSF and computed tomography of the brain repeated the second week after the onset of symptoms (figure).



Unenhanced cranial computed tomograms at the level of the temporal lobe (A) and insula (B)

1 What abnormalities are seen in the figure?
2 How do you interpret the CSF findings?
3 Which microbiological test will help confirm the diagnosis?

Submitted by R Nandhagopal Patient consent obtained.
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SPOT DIAGNOSIS

A woman with abdominal distension and pain

A 40 year old woman presented to the surgical assessment unit with a 12 hour history of abdominal distension and tenderness. She had not opened her bowels or passed wind since her symptoms started. An abdominal radiograph was requested—what does it show (figure)?

Submitted by Joseph Dalby Sinnott and David C Howlett
Patient consent obtained.
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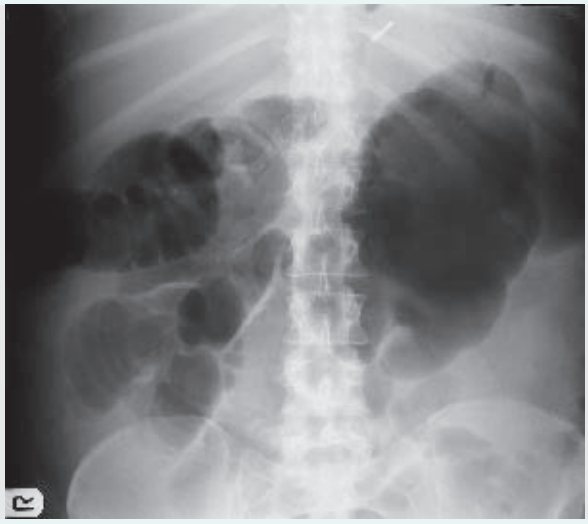

We welcome contributions that would help doctors with postgraduate examinations.

We also welcome submissions relevant to primary care.

See thebmj.com/endgames

answers

CASE REVIEW **Fever with seizure and confusion**

1 Hypodensities in both medial temporal lobes (left more than right) and the left insular region, midline shift, and compression of the left lateral ventricle.
2 Raised protein, normal glucose, lymphocytic pleocytosis, and presence of red blood cells indicate an acute meningoencephalitic process.
3 CSF polymerase chain reaction for herpes simplex type 1 viral DNA.

SPOT DIAGNOSIS **A woman with abdominal distension and pain**

The abdominal radiograph shows a caecal volvulus.

Shiitake mushroom dermatitis

A man presented with a sudden onset, non-pruritic, flagellate, non-blanching truncal rash two days after eating shiitake mushrooms. Dermatographism (physical urticaria with exaggerated wealing when skin is stroked) was negative. Shiitake mushrooms are the second most consumed mushrooms globally. Shiitake dermatitis is well recognised in Asia and its incidence may rise in the West with increasing popularity of fusion cuisine. Skin prick and patch tests are usually negative. The polysaccharide lentinan is thought to elicit this non-allergic toxicoderma. The characteristic eruption appears within three days of eating raw or cooked shiitake mushrooms. The rash is self limiting, although topical steroids may help if it is pruritic.

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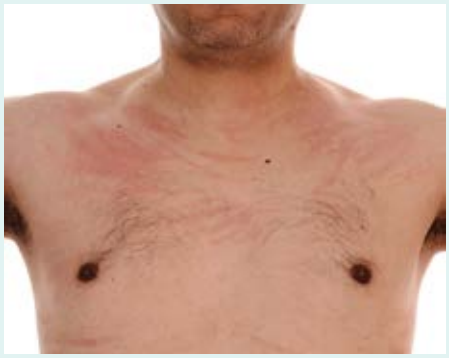
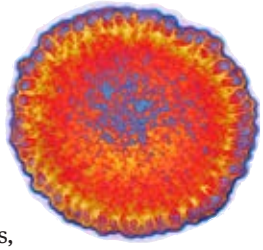
Patient consent obtained



A drug to protect against flu?



Neuraminidase inhibitors for the treatment or prevention of influenza have had a bad press in recent years. But not before they netted billions for their manufacturers, and Daiichi Sanyo of Tokyo has produced a new contender in the form of laninamivir octanoate. In a placebo controlled, company funded trial, a single dose was judged effective as post-exposure prophylaxis for influenza (*Clin Infect Dis* doi: 10.1093/cid/ciw255). More work for the Cochrane Group.

Is there such a thing as truth in the abstract?

Conversations begin as the big cardboard tubes are lifted from the overhead lockers of the plane. "Is that an abstract for the thymus genomics conference?" Such questions have started many a fruitful network friendship. But once the abstract has served its main purpose—a paid trip to Miami—how much of it will stand up to scrutiny? A study of ophthalmology conference abstracts casts a mean eye on what happens when their data appear in a published article (*Trials* doi:10.1186/s13063-016-1343-z). It concludes that "More than half the abstract/publication pairs exhibited some amount of discordance in the main outcome results, calling into question the dependability of conference abstracts."

Declining back pain sick notes

"Goin' on t' club" in Northern England did not mean partying on a Friday night but claiming a sickness certificate. The "club" referred to the mutual insurance society that supported sickness payments before the welfare state. Recent governments have tried to curb spending on the club, and that may be one reason for the reduction in sick notes for back pain in the West Midlands between 2000 and 2010 (*BMJ Open* doi:10.1136/bmjopen-2015-009634). The investigators speculate that attitudes to working with back pain may also have changed.

Research Parasite Award

In January, a *New England Journal of Medicine* editorial claimed that many leading academic researchers regard people seeking to use their data as "research parasites." Twitter erupted with irreverent comments and cartoons, and now the Pacific Symposium on Biocomputing has announced that it will set up Research Parasite Awards at two levels: Junior Parasite and Sustained Parasite. If you think you are adequately parasitic, apply to: parasite.award@gmail.com.

Appendicectomy prevents UC: an urban myth?

It's been taught as a medical mystery to generations of medical students: appendicectomy protects against ulcerative colitis (UC)? The urban myth appears to be true. Danish epidemiologists used their whole population dataset to examine the association. They found that it ran in families, suggesting that genetic or environmental factors are linked to an increased risk of appendicitis but a decreased risk of ulcerative colitis (*Gut* doi:10.1136/gutjnl-2015-311131).

E-cigarettes and thigh burns

E-cigarettes are undoubtedly good for harm reduction in nicotine addiction, but the rechargeable lithium ion batteries that power the devices can represent a fire hazard if damaged, overheated, overcharged, or stored inappropriately. Two case reports from Dundee describe the extensive thermal and chemical thigh burns that can occur when the devices are stowed in trouser pockets (*Burns* doi:10.1016/j.burns.2016.03.027).

Will a stroke make you take statins?

A Swedish survey of 15 192 patients who had experienced a stroke found that 73.9% showed an adherence rate of ≥80% in taking statins over two years (*Eur Stroke J* doi:10.1177/2396987316646026). Adherence was less common in women, very old people, and those with a university education.

Rare antihistamine dangers for children

The hay fever season will see millions of children taking oral antihistamines. Dutch investigators examined a national pharmacovigilance database for serious adverse effects probably related to antihistamine use and found just five in children, three of which were convulsions after taking loratadine or desloratadine (*Arch Dis Child* doi:10.1136/archdischild-2015-310315). Milder effects from second generation antihistamines, such as somnolence, aggression, agitation, and hyperactivity, were much more common.

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