education

ART OF MEDICINE

Eating and huddling with patients



"Hey Doc, thanks for fitting me in today. I'm going outside the wire next week. Can we have our next appointment in the dining hall?"

Many providers would consider conducting a therapy session while eating dinner together a boundary crossing. I considered it being flexible in a war zone.

I was a military psychiatrist and deployed in support of Operation Iraqi Freedom, Deployment psychiatry was unique. Many soldiers had jobs that required them to sleep during the day or conduct missions outside the base for extended periods of time. They couldn't come to the clinic during normal operating hours, but they also needed treatment. As I was in a combat zone, I had to think outside the box.

I adapted my work day to help as many patients as possible. I intermittently conducted sessions in public places such as the dining hall, as chow time was the only opportunity to see some patients. I also engaged patients in therapy while playing video games in the recreation tents, as some felt more comfortable talking while being distracted with an activity. I even continued appointments while huddled with patients under the table in my office during mortar attacks, since cancelling appointments was not an option.

My mission was to help soldiers function better so that they could accomplish their duties. Although there are some boundaries that are never violatedsuch as don't have sex with your patients—a psychiatrist has to maintain a malleable approach to treating patients in an austere location. This shift was crucial to navigating warzone psychiatry successfully.

Kaustubh G Joshi, associate professor of clinical psychiatry, University of South Carolina School of Medicine, Department of Neuropsychiatry and Behavioral Science, Columbia, South Carolina, USA kaustubh.joshi@uscmed.sc.edu

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

Cite this as: BMJ 2017;356:i6734

PRACTICE UPDATES

Competing interests in the NHS

NHS England has published new guidance on the management of conflicts of interests. The guidance covers the setting of standards for declaring gifts; the requirement for organisations to make registers of interests publically available; and the publication of details of payments made to staff by the pharmaceutical industry. The guidance also makes clear that NHS commitments should take precedence over private practice, and that all staff should declare specific details of any outside employment. This does not, at this stage, include declaring earnings.

http://bit.ly/2l7EnBs

CORRECTION

In the Practice Update "Menopause: diagnosis and management" (BMJ 25 February 2017, p 323), we made a mistake. The Update should have stated that NICE's quality standard (http://bit.ly/2kaPY10) "advises that women >45 years old who present with menopausal symptoms should be [not 'should not be'] diagnosed with perimenopause or menopause based on their symptoms alone, without confirmatory laboratory tests."

FAST FACT—IBS INVESTIGATIONS

Diagnoses of inflammatory bowel disease and coeliac disease are often delayed by an incorrect diagnosis of irritable bowel syndrome (IBS). The minimum set of investigations that should be carried out in a patient presenting with suspected IBS is:

- Full blood count
- Erythrocyte sedimentation rate
- C reactive protein
- Coeliac disease serology.
- For more information visit BMJ Learning (http://bit.ly/2mK1rCj)





You can gain CPD points from your reading by recording and reflecting on what you have read in your appraisal folder. We suggest allowing half an hour to read and reflect on 0.5 HOURS each BMJ education article.

If you see a Learning module logo log onto http://learning.bmj.com to complete the online module.



We print a statement on financial interests and patient partnership with each education article. We have resolved to reduce the involvement of authors with financial interests that The BMJ judge as relevant. We encourage and make clear how patients have been involved and shaped our content. More details can be found on bmj.com.

the**bmj** | 11 March 2017 407

PRACTICE POINTER

Emergency care and resuscitation plans

David Pitcher, ¹ Zoe Fritz, ² Madeleine Wang, ³ Juliet A Spiller⁴

¹Resuscitation Council (UK), Tavistock House, London

²Department of Acute Medicine, Cambridge University Hospitals, Addenbrooke's Hospital, Cambridge

³Tugby, Leicestershire

⁴Marie Curie Hospice, Edinburgh

Correspondence to: D Pitcher david.pitcher@resus.org.uk

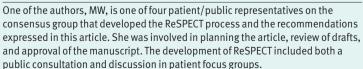
When a person's heart or breathing stops and the cause is reversible, immediate cardiopulmonary resuscitation (CPR) offers a chance of life. However, when a person is dying—for example, from organ failure, frailty, or advanced cancer—and his or her heart stops as a final part of a dying process, CPR will not prevent death and may do harm.



WHAT YOU NEED TO KNOW

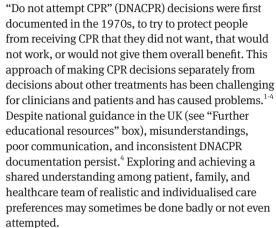
- An emergency care plan allows clinicians to discuss and record patient preferences in advance, not only regarding cardiopulmonary resuscitation, but all aspects of care and treatment in an emergency
- The plan provides recommendations for future scenarios when people might not have the capacity to communicate their preferences
- Tailor the plan to consider the most likely individual situations, such as a sudden acute illness, deterioration in a long-term condition, or sudden cardiac or respiratory arrest

HOW PATIENTS WERE INVOLVED IN THE CREATION OF THIS ARTICLE



Another member of the public with relevant personal experience, who preferred to remain anonymous, emphasised the importance of specific training for clinicians, reviewed the manuscript, and made further suggestions.

Another patient representative reminded us that all members of the consensus group are themselves potential patients and may have family members or friends likely to benefit from emergency care planning,



Here we draw on evidence (box 1), collated for a broader project, to outline how clinicians might plan with their patients.

Who may benefit from having a plan for a possible future emergency?

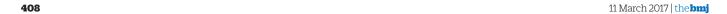
Consider offering this to people with complex health needs, life limiting conditions, or illnesses that predispose to sudden deterioration or cardiorespiratory arrest (box 2). Ask yourself whether a person is likely to have a deterioration for which recommendations agreed in advance could help immediate decision making.

Think about the situations in which others may have to make immediate decisions about care and treatment for that person in their individual circumstances. These will vary substantially between individuals and might include a sudden acute illness (such as heart attack, stroke, sepsis), deterioration in a long term condition (such as advanced kidney failure, heart failure, lung disease, frailty), or sudden cardiac or respiratory arrest.

Other people may ask to make a plan because they want to record their preferences in case of an unforeseen future emergency.

If people have the capacity for relevant decisions, consult them about current and anticipatory treatment decisions—in the UK this is a legal requirement. If they lack capacity, consult those close to them, where practicable and appropriate (box 3). If family or other carers cannot be consulted immediately, make and document any necessary urgent decisions, ideally agreed with other team members, along with a clear plan to consult as soon as possible.

In the UK, the exception to this is if someone has been appointed as legal proxy with powers to make decisions about life sustaining treatment: that person's decisions must be viewed as binding, as long as they clearly serve the patient's best interests.





What is the difference between an emergency care plan and an advance or anticipatory care plan?

Emergency care plans provide concise, relevant, rapidly accessible clinical recommendations for use in an emergency. Advance or anticipatory care plans are more detailed, often completed by the patient, and may focus specifically on end-of-life care. The two plans are complementary; they may be developed together, or completion of one may prompt consideration of the other.

Frame a conversation

Explain to the patient that the aim is to produce recommendations which can guide immediate decision making in a future emergency in which the person does not have the ability or capacity to make or express choices. Avoid jargon. Don't assume that patients or families understand why making a plan is needed.

Discuss treatment to be given, not just treatment to be withheld; this improves the nature of conversations. 10

A mixed methods study found that including a recommendation whether to attempt CPR within overall

goals of care (rather than on a separate DNACPR form) is associated with improved patient care and a reduction in misunderstandings associated with DNACPR.¹⁰

Therefore, it may be helpful not to focus only on CPR, or cardiac arrest, or completing a form. Instead, talk with patients about:

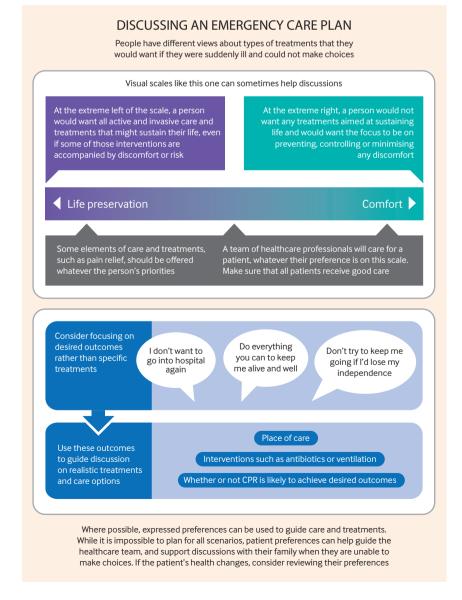
- What might be ahead for them
- What matters most to them.
- What their values are
- Which realistic treatment and care options may help or not help them.
 - When you come to discussing CPR:
- Avoid overemphasising brutality: one relative said that several doctors told her CPR would involve "jumping up and down on the ribs, maybe causing fractures... giving electric shocks... putting needles in." She said it was "as if this is what they had all been taught to say."
- Discussion should focus on the person's own chance of survival, given his or her clinical condition. Remember that people often have unrealistic expectations, in part due to television portrayals of CPR.¹²

Box 1 | Sources of evidence

This article draws on an evidence synthesis, 4 two systematic reviews,⁵⁶ and consensus discussions in a group of stakeholders covering a broad range of care settings and specialties. These stakeholders included nurses, patient representatives, ambulance clinicians, and doctors, who together have developed the ReSPECT process in the UK.7 The principles described are applicable more generally to discussions about advance planning for future emergencies.

Box 2 | Some triggers for discussing emergency care plans

- Requests by the people themselves
- Recognition of long term or complex medical needs discussions can be started in hospital clinics and wards as well as in general practice
- Diagnosis of a life limiting condition—recognition that endof-life care will be needed
- Admission to hospital, especially with an acute illness of any kind
- Admission to a care home or nursing home
- Identified risk of acute deterioration, cardiac arrest, or death



the **bmj** | 11 March 2017 **409**

Box 3 \mid What to do when people lack capacity for making decisions about emergency care plans

Discussion with family or other representatives should follow a similar sequence to discussion with a patient.

- Try to establish the choices that the person would have made if they had capacity; find out if they have an advance care plan or advance statement recording their preferences, or a legally binding instruction such as an Advance Decision to Refuse Treatment (England & Wales)
- Help the family to understand their role: to advise the healthcare team what the
 patient would have been likely to decide, had they capacity, and what they believe
 to be in the patient's best interests, but not to make clinical decisions
- The senior responsible clinician has ultimate responsibility to make decisions in the person's best interests or for their overall benefit
- It is common for relatives to feel that they are being asked to make decisions: take
 care to avoid this. Explain clearly and exactly how you are asking relatives to help
 you make the right decision for the patient, and remember to reinforce the same
 message afterwards, because at these stressful times families often forget or
 misinterpret what has been said to them

Box 4 | When should documentation be reviewed?

- If the person or close family or friends request this
- If the person's condition changes
- If the person moves from one care setting to another (including in-hospital transfer, such as to or from intensive care)

Frequency of review should be planned according to each person's individual situation (frequent review for an acute illness but not usually for an advanced, irreversible, and terminal illness). A fixed review or expiry interval risks encouraging insufficiently frequent review for some people, and inadvertent expiry (leading to disregard of the recommendations) for some whose recommendations needed no review.

The points below may help clinicians to progress a conversation.

Start by discussing the person's understanding of his or her condition and circumstances, and correcting any misunderstandings or unrealistic expectations. *Explain* that people have different views about types of treatment that they would want if they were suddenly ill and could not make choices. Establishing people's views and making recommendations in advance can help to ensure that they get the best treatment. ¹³ *Explore what aims of treatment are important to them* in their situation:

- Some people want to consider all treatments to try to sustain life
- For others comfort is the priority
- Many will want a balance between these—the type of scale shown in the infographic can sometimes facilitate this part of the conversation.

Explore what is important to them for the future. For example, this may be independent mobility, communicating with friends and family, the ability to read or ability to listen to music, being cared for at home. Discuss any realistic treatments that could help achieve their aims and decide together what recommendations to record. These might refer both to treatments that they would like to be considered for and those that they would not want.

Discuss CPR in the context of prognosis, goals of care, and other treatment choices. 14

- If there is a realistic possibility that CPR would restart their heart and breathing, explain its chances of restoring a length and quality of life that they would want, and record the resulting agreed recommendation.
- If there is no realistic likelihood that CPR will work, because the person is dying from an advanced and irreversible condition, ¹⁵ explain this sensitively unless to do so would cause harm.
- If a person with a life limiting condition wants to die at home, document this and, after explaining the need for it, record a recommendation not to attempt CPR.
 If relevant, discuss and record circumstances (if any) in which the person would want to be taken to hospital.

Recording preferences and recommendations

Ensure that you record recommendations in clear, unambiguous language that will be understood easily by those needing to read them in an emergency—such as an ambulance clinician, nurse, or out-of-hours doctor who may not have met the person before.

In the UK an emergency care plan is not an "order" and is not legally binding; this may not be the case in some other countries. Nevertheless, a clinician responding to an emergency will need to be able to justify overruling previously agreed and documented recommendations. Box 4 gives suggestions on when to review recommendations.

Data supplements on bmj.com illustrate three examples of completed ReSPECT forms recording emergency care plans.

Specific challenges

Uncertainty—Many clinical situations involve some uncertainty. Where this exists, be open and honest. Patients and those close to them need support to cope with uncertainty. If you do not feel competent to do this, seek help from a colleague who does. Explore training opportunities to improve your skills and confidence for future occasions.

Resolving disagreement—Provide further explanation (involving experienced colleagues if necessary) to try to achieve shared understanding of the basis for proposed recommendation(s) and agree a shared decision. If disagreement persists, offer and arrange a second opinion before recording any recommendations. Record only agreed recommendations on an emergency care plan. Document details of all discussions in the person's health record, including details of any disagreement. Where there is persistent disagreement over critical elements of care or treatment, legal advice may be needed.

Competing interests: All authors and contributors have been involved in the ReSPECT project. This is a collaborative project, facilitated by the Resuscitation Council (UK), As part of the project we have produced new documentation to support emergency care planning for patients in the UK. As members of the Resuscitation Council (UK), DP and ZF have conducted promotion of and education in high quality resuscitation and received travel and accommodation expenses for these activities. ZF has also received research grants to evaluate emergency care plans. JAS has worked for Marie Curie, NHS Scotland, and the Scottish Government on DNACPR policy and advance care plans, and received travel and accommodation expenses for these activities.

Cite this as: BMJ 2017;356:j876

Find the full version with references at http://dx.doi.org/10.1136/bmj.j876

O ANALYSIS, p 402

410 11 March 2017 | the **bmj**

10-MINUTE CONSULTATION

Paediatric hearing loss

Hannah Nieto, ¹ James Dearden, ² Stacey Dale, ³ Jayesh Doshi⁴

¹Institute of Metabolism and Systems Research, University of Birmingham, Edgbaston, UK

A 3 year old child attends with his mother, who is worried about his hearing. Staff at the child's nursery say he doesn't always respond immediately, and his mother is concerned that he is not talking as much as other children.

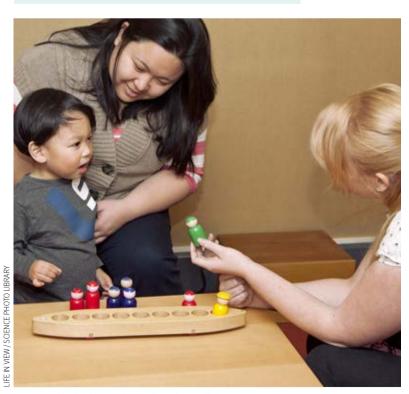
WHAT YOU NEED TO KNOW

- Take paediatric hearing loss seriously, especially if neonatal screening has been missed
- Conductive hearing loss is most commonly caused by glue ear, usually a transient disease
- All children who have had bacterial meningitis should have a follow-up hearing test



HOW PATIENTS WERE INVOLVED IN THE CREATION OF THIS ARTICLE

No patients were involved in the writing of this article.



A 3 year old with his mother undergoing audiology tests





Paediatric hearing loss is a common problem; diagnosis and appropriate intervention are central to the child's development. It is estimated that one in five children of around 2 years will have been affected by glue ear and eight in 10 will have been affected once or more by the age of 10.1

What you should cover

History

The observations of parents or professionals are key; explore inattentiveness at home, nursery, or school, and increased television volume, delayed language skills, and speech impediment. Symptoms will vary with severity and the age of the child.

Ask about

- ear infections, earache, or any observations of the child tugging their ear
- ear discharge
- mouth breathing, snoring, nasal discharge
- duration of symptoms
- age appropriate vocabulary and pronunciation
- known or suspected difficulties learning or playing, which might indicate neurodevelopmental delay
- previous health problems, particularly prenatal, perinatal, or postnatal infections such as meningitis
- neonatal hearing screening test results² (box 1)
- a family history of hearing difficulties

$Box\,1\,|\,Neonatal\,hearing\,screening\,programme$

A well baby (where there is no need for special care, or <48 hours special care) undergoes an automated otoacoustic emissions test. If this is not "passed" after two attempts, then the baby has an automated auditory brainstem response test.

Babies in neonatal intensive care or at risk have both automated otoacoustic emissions and automated auditory brainstem response tests.

Automated otoacoustic emissions test

In a normal ear, a noise stimulus causes vibration of the outer hair cells, which generates acoustic energy called otoacoustic emissions. During the test, a probe in the ear plays clicks and records acoustic energy returning as clicks, and measures function of the auditory pathway from the outer hair cells of the inner ear to the external ear. The test takes a few minutes.

Automated auditory brainstem responses test

Clicks or tones are presented on an ear probe or headphones and the brainstem electrophysiological response is recorded on electrodes, which are placed on the scalp. The test therefore measures the function of the auditory pathway from the external ear to the brainstem. This can also determine hearing thresholds, meaning that treatment can be directed—usually towards hearing amplification or to consideration for cochlear implants. The test takes about 15 minutes.

the **bmj** | 11 March 2017

²North Devon District Hospital, Barnstaple, Devon, UK

³The Cedars Surgery, Swanley, Kent, UK

⁴Heartlands Hospital, Heart of England NHS Foundation Trust, Birmingham, UK Correspondence to: H Nieto dixonh@adf.bham.ac.uk

Box 2 | Age appropriate hearing tests

Visual reinforcement audiometry

7-18 months

Noises are played from headphones or field speakers on either side of the child, and a toy or light corresponds. The child learns to turn to the noise for the "visual reward" and hearing is tested at different volumes.

Play audiometry

2-5 years

The child is asked to perform a task when they hear a certain sound. This is repeated at different volumes and pitches to determine hearing thresholds.

Speech perception test

3 years-adult

This tests understanding of words as well as hearing. For children this often involves linking spoken words or sentences to pictures.

Air versus bone conduction

Most hearing threshold tests can be performed with a vibrating device placed on the mastoid, which passes sound through to the inner ear via bone conduction, bypassing "conductive" causes of hearing loss. This differentiates between conductive and sensorineural hearing loss.

Pure tone audiometry

~5 years-adult

Tones at different volumes and pitches are played and the child responds by pressing a button. The hearing thresholds are noted.

Tympanometry

All ages

This tests the condition of the middle ear by measuring the mobility of the tympanic membrane. In glue ear mobility is reduced, and is not recordable (with a high middle ear volume) if there is a perforation in the tympanic membrane. Tympanometry is therefore not a hearing test, but an assessment of tympanic membrane compliance.

Examination

Examine the pinna, external auditory canal, and the tympanic membrane. Note any perforation, scarring, or fluid behind the tympanic membrane. The normal appearance of the membrane is shown in figure 1.

Otitis media with effusion (glue ear) is the most common diagnosis.³ In glue ear, there is fluid behind the drum; the drum looks dull, loses the light reflex, and can have small bubbles (fig 2). Infection does not need to be present to make the diagnosis (with infection present this is acute otitis media; without infection it is glue ear/otitis media with effusion).

Note mouth breathing and nasal discharge if present. These signs can indicate adenoidal hypertrophy associated with glue ear.

The patient should have an age appropriate paediatric hearing test (box 2), including tympanometry. If the patient is old enough to tolerate it, a tuning fork test should be performed to differentiate conductive from sensorineural hearing loss.

What you should do

What to do will depend on the working diagnosis. Here are some first steps starting from a non-specialist setting.



Fig 1 | Normal tympanic membrane



Fig 2 | Otitis media with effusion/glue ear and tympanosclerosis (benign scartissue)

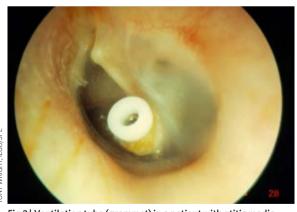


Fig 3 \mid Ventilation tube (grommet) in a patient with otitis media

Working diagnosis of conductive hearing loss

Otitis media with effusion

Glue ear needs to be associated with hearing loss of 25-30 dB in the better hearing ear on two occasions three months apart before intervention. A "watch and wait" period is appropriate, but the child should be followed up. Hearing loss is transient, and parents can be reassured that often it will resolve without the need for intervention. However, during a key time for language development, treatment to improve hearing can be useful if

412 11 March 2017 | the **bmj**

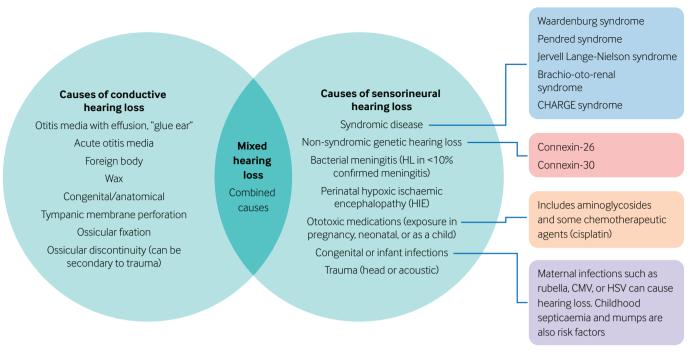


Fig 4 Types of hearing loss

symptoms persist for three months, or if there are recurrent infections. $% \left(\frac{1}{2}\right) =\frac{1}{2}\left(\frac{1}{2}\right) =\frac{$

Treatment options include using a hearing aid or insertion of ventilation tubes (for example, grommets). Ventilation tubes (fig 3) can also reduce the frequency of recurrent middle ear infections (recurrent acute otitis media) and last for 9-12 months.

Acute otitis media

Acute otitis media is often self limiting. In those with uncomplicated infection offer paracetamol or a nonsteroidal anti-inflammatory drug. Offer antibiotics to children whose symptoms have persisted and not improved within four days, or to those who are at risk of complications or are systemically unwell. Antibiotics should be considered in those younger than 2 years with bilateral acute otitis media, or who have a tympanic membrane perforation. Complications of untreated persistent acute otitis media include mastoiditis and meningitis.

Other conductive hearing loss

A tympanic membrane perforation can cause a mild conductive hearing loss, and most will heal spontaneously. The patient should be reviewed after six weeks and referred to an ear, nose, and throat specialist if there are problems

USEFUL RESOURCES

National Institute for Health and Care Excellence guidelines: Otitis media with effusion in under 12s: surgery https://www.nice.org.uk/guidance/cg60-for more details on otitis media with effusion

National Deaf Children's Society www.ndcs.org.uk—for education, health, and social care resources

British Cochlear Implant Group www.bcig.org.uk—for information and videos on cochlear implants

with recurrent ear infections or hearing loss. If there is keratin visible or constant discharge, cholesteatoma should be suspected and the patient should be referred to the ear, nose, and throat team routinely. If cholesteatoma is suspected and there is associated facial nerve palsy, vertigo, or neurological abnormalities suggestive of meningitis, the patient should be seen as an emergency admission.⁶

Wax impaction or foreign body are other differentials, and in this case discussion with the ear, nose, and throat team would be prudent. If there is no physical obstruction in the ear canal and the appearance of the drum and anatomy beyond appears normal, offer referral to the ear, nose, and throat team to assess for ossicular fixation or disruption.

Working diagnosis of sensorineural hearing loss

In those countries where neonatal hearing screening tests are available, most cases of sensorineural hearing loss will have been detected in early life. However, some cases are acquired.

If there is suspicion of syndromic causes, refer to a specialist such as a paediatrician, or otherwise an audiovestibular physician. Sometimes, genetic testing, imaging, and investigation for other disabilities will be required (fig 4).

In all, 10% of patients with bacterial meningitis develop subsequent hearing loss, with 5% having bilateral deafness that is severe to profound. Cochlear fibrosis can occur within a month of infection and can make the insertion of cochlear implant electrodes either technically difficult or not possible. Children with confirmed bacterial meningitis should have audiology assessment before discharge, or within four weeks of the infection.

Competing interests: None declared.

Cite this as: BMJ 2017;356:j803

Find the full version with references at http://dx.doi.org/10.1136/bmj.j803

the **bmj** | 11 March 2017

DIGITAL HIGHLIGHTS

Palliative care from diagnosis to death



In last week's issue of *The BMJ* we published an analysis article by Scott Murray and colleagues (*BMJ* 2017;356:j878), which argued that palliative care needs to start at diagnosis and not be confined to the very end of life—a call that struck a chord among readers. Here are some of the talking points among healthcare professionals from Twitter and *The BMJ*'s rapid responses discussing what good end of life care means to them and how we can achieve it.

Scott Murray @scottamurrayed

We need to do a "Strictly Come Dying" on TV, helping people understand the different dances of death—fast, tango, and waltz.

Kaye Jones @KayeOregon

Not sure when it became palliative care, when I first started nursing it was just care.

Dr Mahesh Menon @algosdoctor

The interface where good science meets being good humans.

Dr Gordon Caldwell @doctorcaldwell

I believe care of the dying is as much part of the work of a hospital as acute surgery, etc.

Dr Amy Davis @MaximizeQOL

#Palliative care helps people live better and fight harder— whatever that means to them—while facing serious illness.

Julie Fenner @JulieFenner1

End of life care is about difficult personal choices...

Michelle Lynn @MichelleLynnRN

End of life care IS healthcare.

Kim Devery @kim_devery

There is so much doctors, nurses, and allied health professionals can do beyond curative.

Morgan Unruh Elmore @MUElmore

#Palliative care helps people with serious illnesses live their best life at any age or stage.

Christopher Button @buttoncj

To achieve this [introducing early palliative care] we need lots of training for general staff or an increase in the specialist palliative care team workforce.

Jillian Schmitt @JSchmittPT

There's an unfortunate lack of knowledge about appropriate referral to palliative care. We need more education across the healthcare continuum.

Karuna Jaggar @karunajaggar

One of many problems in our medical system is that continuing futile treatment is easier (= faster) than discussing patient goals & #palliative care.

Rapid response on bmj.com:

The approach outlined in the article has a wide relevance, not just for healthcare professionals but also for encouraging such discussions with friends and family. There is no need to wait until disease onset. "Palliative" with its origins in terminal care is the wrong word for the—often relatively fit—older population who may associate it with "giving up" and poor prognosis. The old term of "taking stock" is less threatening, used widely, and a way to start the conversation.

Simon Kenwright, retired physician

BMJ OPINION

Why has Bangladesh done so well?

Bangladesh has made remarkable progress since the end of the War of Liberation in 1971, despite the famine of 1974 when probably more than a million people died. It's one of the few low income countries to achieve the millennium development goals. Life expectancy has increased from around 50 to over 70, and women now live longer than men—Bangladesh was previously one of just three countries where men lived longer than women. Deaths of children under 5 have dropped from 25% to 4%, and maternal mortality has fallen from 700 per 100 000 to 150 per 100 000. Almost all children go to school, and the literacy rate of around two thirds is equal among men and women.

Why has Bangladesh done so well? Are there lessons for other countries? In this BMJ Opinion article, Richard Smith explores how government commitment to human development, food security, and reducing poverty; research programmes; and the empowerment of women have been important in Bangladesh's progress

bmj.com

• Read the full article at http://bmj.co/bangladesh_MDGs





TALES FROM THE ARCHIVE

The birth of Frankenstein's monster

On this day in 1818 Mary Shelley's classic horror story Frankenstein was first published. *Frankenstein*, the title character who creates a living creature only to reject it, is a name that has since become synonymous with the perils of pushing scientific boundaries without fully thinking through the consequences. In a review of the book in *The BMJ (BMJ*

2007;335:617), Ross Camidge argues that "the real story of Frankenstein is not that of an experiment gone wrong," nor is it that "of man being punished for encroaching on the territory of the gods." Instead, he says, "it is about recognising that we are responsible for all our children, good and bad, biological, adopted, scientific, and medical."

414 11 March 2017 | the **bmj**





SPOT DIAGNOSIS

Dyspnoea and an unusual chest radiograph

A 70 year old man presents with shortness of breath over several months. What does his chest radiograph show (figure), and what are the most common causes of this condition?

Submitted by James S B Kho and David C Howlett

Patient consent obtained.

Cite this as: *BMJ* 2017;356:j986

CASE REVIEW

A postpartum eruption

A 40 year old woman (gravida 2, para 2) presented to the emergency department nine days postpartum with a four day history of progressive pruritic rash. The rash had initially appeared peripherally on the limbs and later progressed to involve the trunk, abdomen, and back. The palms of the hands and soles of the feet were spared, and there was no mucosal involvement. She had no medical history and was not taking any medication. A previous HIV test and herpes simplex virus titres had been negative. She had presented following a spontaneous delivery after an uneventful pregnancy.

On examination, she had numerous tense fluid filled blisters affecting her hands, feet (fig 1), and flexor and extensor aspects of all limbs. Diffuse erythematous pruritic plaques were also present over her torso. Some blisters had burst due to positional pressure, however, Nikolsky's sign was negative.



- 1. What are the differential diagnoses and how are they investigated?
- 2. What is the most likely diagnosis and aetiology?
- 3. How would you manage this patient?
 Submitted by Nadia Shad, Masud Haq, and Dennis J Barnes
 Patient consent obtained.

Cite this as: *BMJ* 2017;356:j968

If you would like to write a Case Review for Endgames, please see our author guidelines at http://bit.ly/29HCBAL and submit online at http://bit.ly/29yyGSx

3 Systemic steroids are the mainstay of treatment for generalised disease although there is also a role for topical corticosteroids in local disease.

Pruritus should also be controlled with antihistamines.



histocompatibility class II antigens in the placenta.

represent locally applied calamine lotion to soothe pruritus).

Differentials include bullous gestationis), which is distinguishable only on histology, and polymorphic eruption of pregnancy. Diagnosis would be confirmed with a skin biopsy and appearance of the basement membrane under direct immunofluorescence.

The rash is typical of immunobullous disease suggesting pemphigoid. Fig 2 shows tense fluid filled bullae 3x2 cm in size (bottom arrow) and bulla overlying well demarcated pruritic erythematous plaques (top arrow) (white patches represent locally applied calamine locally applied calamine lotion to soothe pruritus).

A postpartum eruption

CASE REVIEW

The chest radiograph shows pericardial calcification.
Given his symptoms, consider echocardiography, as pericardial calcification is associated with constrictive pericarditis. Although it is often idiopathic, recognised causes of constrictive pericarditis include infection, previous include infection, previous collagen vascular disease.

Dyspnoea and an unusual

SPOT DIAGNOSIS

answere

the **bmj** | 11 March 2017

MINERVA A wry look at the world of research

Chikungunya

A 58 year old female nurse presented with a two month history of fever and excruciatingly painful swelling of the small joints of the hands and wrists (right). She had recently visited Kenya. Her C reactive protein levels and plasma viscosity were increased and she tested negative for autoantibodies. Test results for malaria, HIV, syphilis, and flavivirus were negative, but rising antibody titres to Chikungunya virus were detected.

Chikungunya was once considered a tropical illness but now has a far wider geographical

spread. It mirrors West Nile virus and has become endemic in the US.

Clinicians in the Western hemisphere should be aware that Chikungunya virus can mimic rheumatoid arthritis. Prompt recognition avoids unnecessary use of immunosuppressive drugs.

Gayathri Nayar (gnayar 2012@gmail.com), Mahableshwar Albur, North Bristol NHS Trust, Southmead Hospital, Bristol, UK

Patient consent obtained.

Cite this as: BMJ 2017;356:j250



in-hospital mortality, 30 day readmission, 30 day mortality, and one year mortality.

Liquorice in pregnancy

The liquorice plant might have been introduced to England from Spain by monks at Rievaulx Abbey, where its name *licoresse* (derived from the Greek *glukurrhiza*) sounded similar to the medieval

Yorkshire word likerish, meaning pleasant. Glycyrrhizin from liquorice root can promote glucocorticoid transfer across the placenta, therefore pregnant women are discouraged from its pleasures. A Finnish observational study discovered that girls and boys exposed to high maternal glycyrrhizin consumption scored 7 points lower on tests of intelligence quotient, had poorer memory, and had 3.3-fold higher odds of developing attentiondeficit/hyperactivity disorder problems compared with children whose mothers consumed little to no glycyrrhizin (Am J Epidemiol doi: 10.1093/aje/kww172). So it is probably best to save the Allsorts for after delivery.

Eating disorders in women through life

Structured interviews with 1042 women from the UK Avon Longitudinal Study of Parents and Children showed that by mid-life, 15% of them had experienced an eating disorder (*BMC Med* doi: 10.1186/s12916-016-0766-4). Few of them had sought healthcare. Previous childhood sexual abuse was associated with all binge or purge type disorders, and feelings of being controlled by others were associated with binge-eating disorder.

Alcohol and pancreatitis

If there is a causal relationship between alcohol consumption and pancreatitis, its incidence should be mirrored by changes in population alcohol sales, and should show a seasonal peak around late December and early January. Sweden maintains a national register of acute pancreatitis, which shows a steady increase in its incidence. But Sweden is experiencing a reduction in total alcohol sales, and the alcohol consumption reported by patients with pancreatitis is also decreasing (*Alcohol Alcohol* doi: 10.1093/ alcalc/agx005). There is also no sign of a seasonal effect.

Sharing decisions about vascular surgery

Surgeons have been talking to patients about operations for hundreds of years, and the earliest signed surgical consent form dates from 1524 in Islamic Turkey. But in vascular surgery, where there can be difficult trade-offs between risks and benefits, shared decision making is still an imperfect art, according to a Dutch mixed methods study of 67 patients (*BMJ Open* doi: 10.1136/bmjopen-2016-013272). Most patients wanted to share in decisions about their proposed treatment but were either dissatisfied with their discussion or weren't sure if any had taken place.

Improvement in atrial fibrillation outcomes

In older American patients, adjusted rates of hospitalisation for atrial fibrillation increased by almost 1% per year between 1999 and 2013 (*Circulation* doi: 10.1161/CIRCULATIONAHA.116.022388).

Treatments became more complex and expensive, but this was associated with improved outcomes including lower rates of

Unnatural shocks that flesh is heir to

In a study of 10266 American patients with implanted cardioverter defibrillators, 963 (9.4%) patients had 1885 shock events, of which 56% were assessed as appropriate, 38% inappropriate, and 6% indeterminate (Circ Cardiovasc Qual Outcomes doi: 10.1161/CIRCOUTCOMES.115.002210). Implanted cardioverter defibrillator shocks triggered a cascade of investigations: cardiac catheterisation was performed in 75% of all shock related hospitalisations (including 51% after inappropriate shock event hospitalisations), yet percutaneous coronary intervention was uncommon (6.6%). Health expenditure soared in the post-shock period, and did not differ substantially between appropriate and inappropriate shocks.

Go to the ant, thou pathogen

In a Brazilian hospital, resident ants were captured using protein and carbohydrate traps (*Sci Acad Publ* doi: 10.5923/j. microbiology.20170701.01). A variety of species carried an impressive range of human pathogens, many of which were drug resistant. To the best of Minerva's knowledge, this study of hospital ant borne diseases is a first, and might herald a new field of medical science: nosocomiobacteriophormyrmicoepidemiology.

Cite this as: *BMJ* 2017;356:j1096

