

education

RESEARCH REVIEWS Fortnightly round up from the leading medical journals

Following up patients after hospital discharge

Is there more to post-discharge follow-ups than rates of readmission?

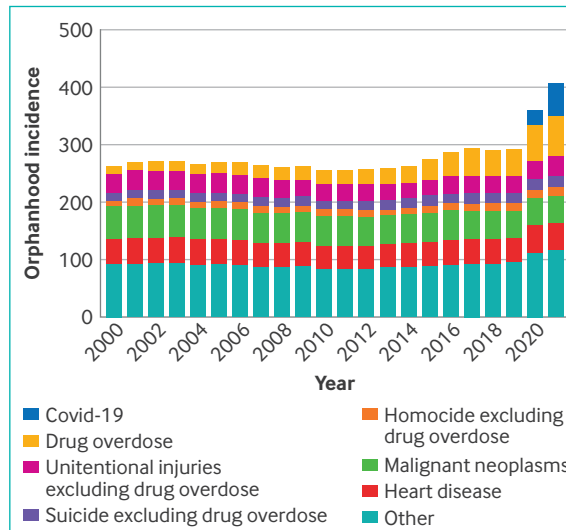
Contacting patients to follow up with them within seven days of discharge doesn't reduce 30 day readmission rates, according to this systematic review and meta-analysis. Most of the evidence comes from studies that targeted patients at high risk of admission (8 of the 11 randomised trials) and used telephone review (10 studies), typically within three days of discharge. Is this more low value care that we should cut, or is there more to post-discharge follow-ups than readmission rates?

• *Ann Intern Med* doi:10.7326/ANNALS-24-01140

Old flus

The UK government spent over £400 m stockpiling oseltamivir around the time of the swine flu pandemic of 2009.

A new systematic review concludes that the only antiviral that might reduce symptom duration for



Rise in orphaned children in the US

In 2020 there were over 400 000 children orphaned in the US, according to a modelling study in *Nature Medicine*. Yet, despite the fact that medical problems are both a cause and consequence of orphanhood, we rarely seem to hear about it in medical journals. One of the striking trends in this paper (see figure) is the increase in total numbers of orphaned children in 2020 and 2021 and the contribution of covid-19 and drug overdose. The study also found differences in causes of orphanhood according to ethnicity, with drug overdose being the leading cause in non-Hispanic white children but not among minority ethnic groups.

• *Nat Med* doi:10.1038/s41591-024-03343-6

non-severe influenza virus infection is baloxavir (by 1.02 days (95% CI 1.41 to 0.63)), although it still doesn't reduce hospital

admissions in low risk patients, and isn't licensed in the UK.

• *JAMA Intern Med* doi:10.1001/jamainternmed.2024.7193

Infrequent zoledronate to prevent vertebral fractures

“Small individual gain, larger population gain” sounds like the theme for a preventive medicine conference. It's actually the headline of an editorial about a new trial of zoledronate for fracture prevention.

The study recruited women aged 50-60 who had a bone mineral density T score of between -2.5 and 0. They were randomised to receive a dose of zoledronate at baseline and another after five years; or two doses of placebo.

Vertebral fracture was assessed by radiograph after 10 years. The relative risk of a fracture from the



CLINICAL PICTURE

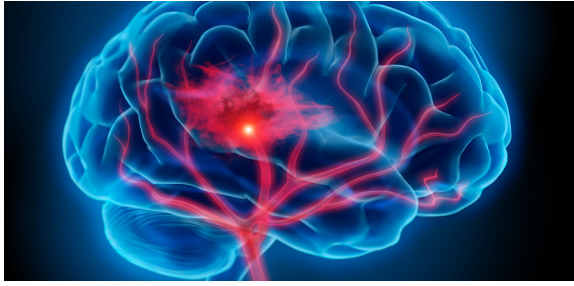
A pigmented oral lesion

This man in his early 70s presented with a six month history of a pigmented lesion on the gum. He reported no associated pain, bleeding, or constitutional symptoms. On examination, there was a heart shaped brown lesion located at the

buccal (figure) and palatal aspect of the upper jaw. Histological examination showed oral melanoma with invasion of the maxillary bone. The patient underwent a partial resection of the maxillary bone with removal of the tumour. He was treated with adjuvant chemotherapy with nivolumab and post-surgical

radiotherapy, but died a year after his diagnosis.

The differential diagnoses for pigmented oral lesions include physiological pigmentation, pigmentation secondary to trauma, chronic inflammation, endocrine disorders such as Addison's disease, and drug related pigmentation, as well



two doses of zoledronate compared with placebo was 0.56 (95% CI 0.34 to 0.92), which, since around 10% of women under the age of 65 sustain a fracture over a 10 year period, could amount to a large reduction in fractures at a population level.

• *N Engl J Med* doi:10.1056/NEJMoa2407031

The XI factor

Researchers are targeting factor XI in the clotting cascade as a safer target for prevention of ischaemic stroke, due to evidence that factor XI is essential for thrombosis but not for haemostasis. Monoclonal antibody abelacimab binds inactive factor XI and blocks its activation. A phase 2 trial has assessed the safety of abelacimab against that of rivaroxaban in people with atrial fibrillation and moderate to high risk of stroke, and it was terminated early because of the lower rates of major or clinically relevant non-major bleeding with abelacimab versus rivaroxaban (hazard ratio

for 90 mg abelacimab 0.31 (95% CI 0.19 to 0.51)). A phase 3 trial is under way to see if the drug actually works to prevent stroke.

• *N Engl J Med* doi:10.1056/NEJMoa2406674

No renal difference for different SGLT-2 inhibitors

BMJ/Rapid

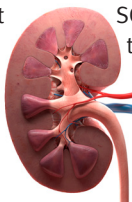
Recommendations suggest SGLT-2 inhibitors for people with diabetes and more than three cardiovascular risk factors. But which one to use?

To assess any difference in renal outcomes between SGLT-2 inhibitors, a target trial emulation study compared initiating empagliflozin with dapagliflozin in adults with type 2 diabetes in Denmark. It found no difference between the two in terms of risk of acute kidney injury, developing chronic kidney disease, or progression of kidney disease.

• *JAMA Intern Med* doi:10.1001/jamainternmed.2024.7381

Tom Nolan, clinical editor, *The BMJ*, London; sessional GP, Surrey

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as neoplastic pathologies. Oral melanoma is often asymptomatic, and clinicians should be vigilant for melanoma as a cause of pigmented oral lesions, particularly in older patients.

Fatt Yang Chew, China Medical University Hospital, Taichung, Taiwan; Suat Yee Lee (csmopathology@gmail.com), Chung Shan Medical University Hospital, Taichung, Taiwan

Patient consent obtained.

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MINERVA From the wider world of research

Morning coffee

For years, Minerva has started the day with a pot of tea. A report from the National Health and Nutrition Examination Survey 1999-2018 makes her wonder if she should switch to coffee (*Eur Heart J* doi.org/10.1093/eurheartj/ehae871). Among 40 000 participants, those who drank coffee in the morning had substantially lower all cause and cardiovascular mortality rates compared with non-coffee drinkers.

Surprisingly, drinking coffee later in the day had no health benefits.



Judging probability

P values and confidence intervals are often used in science and medicine to quantify chance and uncertainty. An essay in *Nature*, however, claims that probability isn't an objective property of a system but a construct rooted in subjective judgments and doubtful assumptions (www.nature.com/articles/d41586-024-04096-5). It contains a challenging quiz that assesses not only what you know but also how confident you are about it. Are you cautious, hedging knowledge gaps with an admission of low certainty? Or are you overconfident and unaware of the extent of your ignorance?

Premonitory symptoms of multiple sclerosis

A case-control study from Germany of 1000 young people diagnosed with multiple sclerosis identified several disorders that were present more often in the five years before diagnosis than in controls (*JAMA Netw Open* doi:10.1001/jamanetworkopen.2024.52652).

Some of them, including obesity, abnormalities of visual refraction and gastritis were too common and too weakly associated to be useful as warning signs. But reports about disturbance of peripheral sensation should be considered a red flag.

Conditional cash transfers

Giving poor people money is an effective way of reducing diseases associated with poverty. An evaluation of Brazilian Bolsa Familia Program, the world's largest conditional cash transfer initiative, reports a large reduction in both the incidence of tuberculosis and mortality in beneficiaries. The impact was greatest among those living in extreme poverty (*Nature Med* www.nature.com/articles/s41591-024-03381-0).

The perils of prevention

In his book *Medical Nemeses*, published 50 years ago, Ivan Illich famously argued that medicine had become a threat to health. Another theologian, Paul Scherz, brings the discussion up to date (*Hedgehog Review* hedgehogreview.com/issues/in-need-of-repair/articles/the-pathologies-of-precision-medicine).

He worries that precision medicine turns doctors away from patient care towards a preoccupation with risk. High risks can easily be turned into pre-diseases, which is good for companies selling long term preventive treatments, but bad for asymptomatic people who have to cope with adverse effects and anxiety.

Nut allergies on flights

Contrary to popular belief, nut particles are not transmitted through aircraft ventilation systems and do not pose substantial risks to passengers with food allergies (*Arch Dis Child* doi.org/10.1136/archdischild-2024-327848). Food induced allergic reactions are less common during flights than on the ground. The most effective preventive measure is for passengers to wipe down surfaces around their seats.

Cite this as: *BMJ* 2025;388:r143



Nut particles are not transmitted through aircraft ventilation systems

Ask an expert: HIV in primary care

Surinder Singh,¹ Daniel Ivens,² Sophie Mylan³

¹Research Dept of Primary Care and Population Health, University College London

²Hampstead Group Practice, London

³City & Hackney Integrated Primary Care CIC, London

Correspondence to: S Singh s.singh2@ucl.ac.uk

This article was adapted from a BMJ Learning course Ask an expert: HIV in primary care: <https://new-learning.bmj.com/course/30000120>



General practitioners with a special interest in HIV Surinder Singh, Daniel Ivens, and Sophie Mylan provide expert answers to questions from general practitioners related to identifying, testing, and caring for patients with suspected or confirmed HIV infection, identifying seroconversion illness and patients who present late in their disease course, and the principles of antiretroviral therapy.

WHAT YOU NEED TO KNOW

- Approach HIV as you would any other long term condition. People living with HIV appreciate empathy, access to a named doctor, continuity, and good communication with specialists
- Knowing the prevalence of HIV in your area of practice will help determine your policy on testing
- For those with a negative HIV test result and a high risk exposure, consider repeating the test 45 days after the exposure

BMJ Learning

TEST YOURSELF

You see a new patient, a 31 year old woman, who tells you she was diagnosed with HIV infection two years ago. She has been seeing a specialist and is receiving antiretroviral therapy.

What do you need to consider?

- Recommend she has a cervical smear test every two years
- Recommend vaccination for hepatitis B, irrespective of her hepatitis B status
- Recommend she receives seasonal influenza vaccine and pneumococcal conjugated vaccine
- Find out her CD4 count, and if it is less than 200 cells×10³/L recommend she receives the measles, mumps, rubella (MMR) vaccine.

(Answer at end of article)

What are the implications for primary care when you become aware of a patient being HIV positive?

In England, an estimated 4700 people are undiagnosed with HIV.¹ Offer testing wherever an opportunity arises. In our experience, multiple steps can be taken in primary care services to become more “HIV friendly.” These include:

- Displaying confidentiality notices prominently in consulting rooms and waiting areas. HIV remains a stigmatised condition for some people, and providing reassurance regarding medical confidentiality can encourage patients to seek support when required.
- Ensuring a commitment to caring for families affected by HIV/AIDS, including people of all ages. While most of a practice’s patients are likely to be adults, children are also affected by the conditions.
- A determination to ensure that women and people with a cervix affected by HIV infection are offered a cervical smear test annually, in line with current national UK guidance.² This may be difficult to achieve in practices with a high turnover of patients.
- A commitment to providing preventive healthcare—for example, appropriate vaccinations, for patients living with HIV. Guidance for vaccinations for those who are HIV positive can be found in The Green Book³ and the British HIV Association guidance⁴ on immunisations. Manage HIV as you would any other long term condition. People living with HIV appreciate empathy, access to a named doctor, continuity, and good communication between primary care and specialists.⁵ Knowing a patient’s latest CD4 count helps to guide up-to-date, safe, and effective treatment, particularly regarding immunisations. Coding HIV diagnosis correctly in the patient notes in GP clinical record systems may bring up prompts about some of the recommended vaccinations (box 1).

Who should I be offering testing to, and how?

In our experience, in depth counselling for a patient about having an HIV test is often unnecessary and may be inappropriate. Instead, we recommend de-stigmatising the condition and the test, by considering it like other chronic conditions. In practice, this means gaining consent for a test by talking to the patient about why it is a good idea to have the test, with a focus on normalising this process.

The benefits of HIV testing for patients include:

- Knowing your own status enables you to access appropriate treatment, and avoids HIV transmission to others (especially if your viral load is undetectable)
- Knowing your own status enables you to be monitored and treated
- Treatment is becoming much easier to take and has fewer side effects than previously. Many patients now take just one tablet a day
- Early treatment can lead to a normal life expectancy. HIV testing should become routine. Knowing the prevalence of HIV in your area of practice will help

determine your policy on testing. In areas of low prevalence (<2%), the following groups should be offered an HIV test^{9 10}:

- Patients who are symptomatic (including if patients present with particular symptom patterns, such as recurrent pneumonia or severe psoriasis)
- Known to be from an area of high prevalence
- Female sexual contacts of men who have sex with men
- If male, known to be sexually active with other men and who have not been tested in the previous year
- Reporting sexual contact with someone from a high prevalence region of the world
- Trans women
- Diagnosed with or requesting testing for any sexually transmitted infection
- Sex workers
- Prisoners
- History of injecting drug use
- Sexual partner of someone with HIV infection or of someone at a high risk of HIV.

In areas of high prevalence, HIV testing is recommended for those not previously diagnosed with HIV and who are new registrants to a practice, and those having blood tests anyway, and have not been tested in the previous year.⁹

HIV opt out testing is the process by which blood samples collected for a patient unrelated to HIV testing are subsequently tested for HIV (along with other bloodborne viruses, like hepatitis B). Patients who do not want their blood to be tested for HIV can decide to opt out of this testing (box 2). Currently, HIV opt out testing is recommended in¹⁰:

- Antenatal clinics
- Addiction services
- Termination of pregnancy services
- Hepatitis B and C, tuberculosis, and lymphoma healthcare services.

How do you distinguish HIV from other acute infections?

HIV seroconversion illness, also known as primary HIV infection, is a short illness that typically occurs two to four weeks following exposure to HIV.¹³ It shows that the immune system is producing antibodies reacting to the presence of HIV in the body, and occurs in around 80% of individuals.

Some individuals have very minimal symptoms, usually lethargy and tiredness, but others have a fulminant illness comprising flu-like symptoms or acute neurological signs, such as acute facial palsy or a transverse myelitis. Trying to distinguish patients with primary HIV infection from other viral illnesses or conditions can be difficult.¹⁴ The most common clinical manifestations of primary HIV infection include¹⁵:

- Febrile illness
- Lymphadenopathy (often generalised)
- Pharyngitis
- Maculopapular rash
- Myalgia, headaches, diarrhoea
- Nausea/vomiting.



Box 1 | Immunisations for adults who have HIV⁶ (based on British HIV Association and author recommendations on RSV and covid-19)

- Influenza vaccine: Offer seasonal influenza vaccine and a single dose of the pneumococcal conjugate vaccine (PCV-13) regardless of CD4 count
- Meningococcal vaccine: Follow national guidance for immunisation against meningococcal (meningitis B and C) infection, for people at risk.
- Pneumococcal vaccine: Offer a single dose of the pneumococcal conjugate vaccine (PCV-13) regardless of CD4 count. People over 65 (or any age if they have an added risk such as diabetes or chronic obstructive pulmonary disease) can be given a further pneumococcal vaccine, in which case a single dose of pneumococcal polysaccharide vaccine (PPV-23) should be given, regardless of CD4 count.⁴ No further doses of PCV-13 or PPV-23 need to be given thereafter.
- MMR vaccine: Screen adults for measles IgG regardless of whether they had measles-containing vaccine as a child and screen women of childbearing age for rubella IgG if rubella status is unknown.⁴ The MMR vaccine is a live vaccine and can be given only to those who have a CD4 count of >200 cells $\times 10^3/L$, are clinically stable, and not pregnant. The vaccine should be postponed for those who have a CD4 count of less than 200 cells $\times 10^3/L$ and are not taking combined antiretroviral therapy. When offered to a patient, two doses of MMR vaccine should be given, one month apart.
- Shingles vaccine: People eligible should be offered the shingles vaccine (Shingrix).^{4 7} If in doubt, check with the specialist unit.
- Chickenpox vaccine: People eligible should be offered two doses against varicella infection. If in doubt, check with the specialist unit.
- Hepatitis B vaccine: The British HIV Association recommends hepatitis B vaccination for all adults with HIV who are not already immune to hepatitis B.
- Hepatitis A vaccine: The British HIV Association recommends hepatitis A vaccination for non-immune adults who are at risk of hepatitis A infection. Three doses of hepatitis A vaccination are required if CD4 count <350 cells $\times 10^3/L$.
- Offer three doses of the human papillomavirus vaccine, ideally to be given within a 12 month period⁸
- Pertussis vaccine: Consider immunisation against pertussis during pregnancy, in line with national guidance where you practise.
- Respiratory syncytial virus and covid-19 vaccines in line with guidance relevant to your area of practice
- Review the need for further vaccinations related to travel indications⁶

Box 2 | Opt out testing in emergency departments

Emergency departments in the UK in high prevalence areas for HIV and other bloodborne viruses have increasingly included opt out HIV and bloodborne virus testing for all adult patients having blood tests.

UK based projects and studies adopting this approach in recent years have identified people with undiagnosed bloodborne virus infections and those with known infections who are no longer accessing care.^{10 11} The British HIV Association has developed interim guidance to assist services that want to develop this model, including other facilities where patients present for urgent care.¹²



Knowing a patient's latest CD4 count helps to guide up-to-date, safe, and effective treatment

To detect primary HIV infection, testing for HIV needs to become routine. If investigating flu-like illness and intending to request bloods, offer an HIV test at the same time.⁹ Depending on your area of practice and local policy, different options may be available for which HIV test to order, including checking for HIV antibodies, p24 antigen, or HIV ribonucleic acid. The standard method involves taking a venous blood sample and using an antibody/antigen test.¹⁰

The “window period” is the time between infection and the point when a test will give an accurate result. Third generation laboratory tests are considered accurate two months after exposure. However, the British HIV Association considers the window period for fourth generation serological testing (now routine in most laboratories) to be 45 days.¹⁶ If the test is done within 45 days of a high risk exposure, it may be necessary to repeat the test after the window period.

At the time of primary HIV infection, a patient has a high viral load. This is a particularly high risk time for onward transmission. Therefore, warn patients about being able to transmit the virus easily.

Viral load tests (assessing HIV ribonucleic acid) are usually requested by specialist services. These tests are more sensitive than antibody/antigen tests, and can detect HIV infection at an earlier stage, but false positives can also occur. A person presenting with symptoms of acute infection, who tests positive for HIV in the blood, despite negative or indeterminate antibody results, is considered to have primary HIV infection.

Other options exist for testing, especially if the patient declines traditional venepuncture.

- Point-of-care testing, usually as a pin prick blood test, can be considered. It is convenient for the patient and the results are almost immediate. Practical considerations include:
 - The window period can be 90 days¹⁷
 - Where point-of-care testing is reactive (ie, positive), a confirmatory blood test is required. Discuss the potential need for a confirmatory test when taking consent from the patient for point-of-care testing
 - Testing can be falsely reactive, especially in low prevalence areas
 - A protocol, designed between primary care and HIV services, to coordinate further testing is implemented in many services across the UK.
- Self-sampling is where an individual can request a sample kit (eg, blood or saliva testing) and send it via

post for testing to a laboratory.⁹ Notification of results is dependent on local pathways, but includes via text message, telephone call, or in-person appointment

- Self-testing, distinct from self-sampling testing, is a service in which a person can test at a time and place of their own choosing and results are available typically after 15 minutes, in the absence of a healthcare professional.⁹ Limitations to this method of testing include those outlined with point-of-care testing, as well as relying on people to self-present to primary care with the results.

What are the signs, symptoms, and red flags in patients who present late in their disease course?

In 2019, 41% of new HIV diagnoses in England were defined as “late,” and this percentage rose between 2020 and 2022, likely reflecting delays in diagnoses during the covid-19 pandemic, as well as a rise in diagnoses among people likely to have acquired HIV abroad in the same period.^{18 19} Late diagnosis is defined as a CD4 count less than $350 \text{ cells} \times 10^3/\text{L}$ within 91 days (3 months) of diagnosis.²⁰ The later a person is diagnosed with HIV, the more likely they are to develop complications¹⁴ including fulminant oesophageal candidiasis, disseminated lymphoma, and cerebral toxoplasmosis.

For patients who are undiagnosed, indications of HIV infection may be:

- Other infections (tuberculosis, chest infections, pneumonia), signs of chronic immune suppression (herpes, varicella zoster, especially if severe), or overt signs of meningitis/encephalitis (toxoplasmosis or other space occupying lesions)
- Patterns of diagnoses that might indicate low immunity—for example, a patient with recent Bell's palsy, varicella (shingles), or community acquired pneumonia. It is the syndromic nature of the conditions that should prompt thoughts about HIV infection. The 2020 British HIV Association adult HIV testing guidelines outline the full list of indicator conditions which should trigger HIV testing.¹⁰
- Any diagnosis of a sexually transmitted infection, unexplained leucopenia, thrombocytopenia, or unintended weight loss, should also prompt HIV testing.

What do I need to consider when seeing a patient who has started antiretroviral therapy?

The aims of treatment are to reduce the activity of HIV, as measured by viral load, so that levels within the blood are undetectable, while ensuring side effects are minimised and overall quality of life is maintained. With treatment being offered, irrespective of CD4 count, patient engagement is crucial, especially since medication adherence is the key to ensuring that viral activity is maximally suppressed.^{21 22} A person diagnosed with HIV who receives treatment early can have a normal life expectancy.²¹



HIV has two types. HIV-1 is more common in the UK, whereas HIV-2 is more common in West Africa or in people with West African origin.²³ Treatment of HIV-1 is usually composed of the following medication groups^{21 22}:

- Two nucleoside reverse transcriptase inhibitors (eg, tenofovir or emtricitabine), and either
 - A non-nucleoside reverse transcriptase inhibitor (eg, efavirenz), or
 - A boosted protease inhibitor (eg, indinavir), or
 - An integrase inhibitor (eg, dolutegravir).
- Fixed dose combinations include single tablet regimes—eg, efavirenz/emtricitabine/tenofovir.

This combination of medications is designed to control the virus and ensure that patients can continue with medications over months and years.^{21 22} Adherence is important; irregular intake of medication may allow the virus to re-emerge and lead to resistance.

Report and manage side effects in collaboration with the patient's HIV specialist team. Common side effects include headaches, rashes, tiredness, and gastrointestinal upset including nausea and vomiting. Often these are mild and transitory and may not need treatment. Some patients are hypersensitive to abacavir, and specialist services should not start this drug unless the patient is proved HLA B*5701 negative.²⁴

Common drug interactions include steroids (topical and inhaled), quetiapine, proton pump inhibitors, methadone, oral contraceptives, anti-

AUTHOR'S VIEW: KEEPING PATIENTS ENGAGED IN THEIR CARE

Over the years, one of the more common patient profiles I have encountered is that of someone with known HIV infection or AIDS who then “goes missing.” In other words, he or she might have gone travelling, and thus does not respond to invitations or attend the hospital clinic. The patient will have been started on antiretroviral therapy but then does not continue it.

The outcome for such patients is not good, often with the patient re-presenting with further, more serious complications of HIV infection, including late stage disease.

Our last example of this was a middle aged woman who had HIV infection for over 10 years. She collapsed one winter's evening with pneumonia and what turned out to be miliary tuberculosis. She also had a lymphoma affecting her central nervous system.

Therefore, it is essential that primary care keeps patients engaged in their care, tries to understand the patient's perspective and why they may not be engaging, and liaises with the local HIV service (with the patient's consent).

FURTHER RESOURCES

- British HIV Association (BHIVA) (www.bhiva.org/index.php)
- Change the face of HIV is a campaign that aims to increase HIV testing in primary care by raising awareness among GPs.
- Do it London summarises strategies to reduce HIV transmission (doitlondon.org/)
- Information about how to get an HIV test (<https://www.aidsmap.com/about-hiv>)
- Information on how to request a self-sampling kit online (<https://freetesting.hiv/> and (www.shl.uk/)
- National AIDS Trust (www.nat.org.uk/)
- NHS information for patients about HIV and AIDS (www.nhs.uk/conditions/hiv-and-aids/)
- Terence Higgins Trust (www.tht.org.uk/)

epileptics, antidepressants, lipid lowering agents, some antimicrobials (eg clarithromycin, minocycline, and fluconazole), phosphodiesterase inhibitors, and therapies to treat hepatitis C virus.²¹

For more information on antiretroviral drug interactions, the British HIV Association recommends the University of Liverpool's drug interaction checker.²⁵ This site outlines drug interactions and it also contains general information on HIV medications, including short videos on various topics for patients and clinicians.

Competing interests: None declared.

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Find the full version with references at <http://dx.doi.org/10.1136/bmj.r129>

BMJ Learning

To obtain accredited continuous professional development points, subscribers to BMJ Learning can complete the full module at new-learning.bmj.com/course/30000120. The module contains seven additional questions submitted by users of BMJ Learning, related to general considerations in primary care, addressing common concerns, pre- and post-exposure prophylaxis, and considerations for HIV in pregnancy, healthcare workers, and the ageing population.

TEST YOURSELF (REVISITED)

C (Recommend she receives seasonal influenza vaccine and pneumococcal conjugated vaccine) is the correct answer.

Current UK guidelines recommend that patients with HIV infection are offered seasonal influenza vaccine and a single dose of the pneumococcal conjugate vaccine (PCV13) regardless of CD4 count.^{3 4}

Women with HIV should be offered a cervical smear test annually,² which may be delivered in primary or secondary care depending on local protocol. The British HIV Association recommends hepatitis B vaccination for all adults with HIV who are not already immune to hepatitis B only, and hepatitis A vaccination for non-immune adults who are at risk of hepatitis A infection.²⁶ The MMR vaccine is a live vaccine and can only be given to those who have a CD4 count of >200 cells/ $\times 10^3$ /L, are clinically stable, and not pregnant. The vaccine should be postponed for those who have a CD4 count of less than 200 cells 10^3 /L and are not on combined antiretroviral therapy.⁴

PRACTICE POINTER

Diagnosis and management of complex post-traumatic stress disorder (C-PTSD)

Joanne Stubbley,¹ Beverley Chipp,² Marta Buszewicz^{3,4}

Full author details on bmj.com

Correspondence to: J Stubbley jstubbley@tavi-port.nhs.uk

Complex post-traumatic stress disorder (C-PTSD) is a new diagnosis in the International Classification of Diseases (ICD) 11.¹ It is not currently recognised in the Diagnostic and Statistical Manual of Mental Disorders (DSM) 5.² Caused by recurrent, chronic, or sustained trauma, C-PTSD has the clinical features of PTSD and symptoms that reflect the prolonged impact of sustained trauma on self-organisation, encompassing affect regulation, negative self-concept, and difficulties sustaining interpersonal relationships. Here we explain what C-PTSD is, how to recognise it, and the fundamentals of management, acknowledging that the evidence base continues to grow and evolve.

What is complex PTSD?

Complex PTSD may occur following exposure to events that are traumatic (box 1, see bmj.com). Typically, this means chronic, repetitive, or prolonged trauma but may also arise from a single event or experience.¹

Complex PTSD comprises two sets of PTSD symptoms and disturbances of self-organisation (box 2), with diagnostic criteria requiring the presence of both. The essential features of PTSD include re-experiencing symptoms (nightmares, flashbacks, intrusive images); hyperarousal (anxiety, irritability, exaggerated startle, insomnia); and avoidance. The DSM-5 classification of PTSD included a fourth category of symptoms that describes changes in cognition and mood, as well as specifying the presence or absence of dissociation, defined as the involuntary disruption of identity,

WHAT YOU NEED TO KNOW

- Complex PTSD is a new diagnosis in ICD-11. It combines the symptoms of PTSD with difficulties in self-organisation
- Complex PTSD usually arises from repeated, prolonged, or chronic exposure to trauma, whereas PTSD is often caused by a single episode of trauma
- Best practice guidelines advise phase based and multi component therapy, personalised to individual needs



0.5 HOURS



See learning.bmj.com for linked learning module

sensations, perceptions, affects, thoughts, memories, and control over bodily movements or behaviour.² ICD-11 does not include dissociation as a core feature of C-PTSD, but evidence suggests it is a marker for severity of C-PTSD with poorer health outcomes and higher levels of functional impairment.³

In 1992 Herman⁴ first used the term “complex trauma” to describe a constellation of symptoms following chronic, repetitive, or prolonged trauma. She defined the central feature as a sense of captivity, where escape from the ongoing trauma(s) is not possible. Her description included PTSD symptoms alongside somatisation, dissociation, affect dysregulation, and difficulties with relationships.

The introduction of C-PTSD as a new diagnosis has been controversial, particularly because of the overlap in presentation and risk factors with PTSD. However, the construct validity of C-PTSD versus PTSD has been confirmed by numerous studies, highlighting that the nature of the trauma is more likely to be multiple and prolonged, and the level of functional impairment greater in C-PTSD compared with PTSD.^{5,6}

Further controversy has arisen from potential diagnostic overlap of C-PTSD with several other conditions. Current C-PTSD criteria demonstrate diagnostic and clinical crossover with neurodiversity, dissociative identity disorder (DID), and emotionally unstable personality disorder (EUPD), which can make accurate diagnosis challenging. Neurodiversity, including attention deficit/hyperactivity disorder (ADHD) and autism, may impact on the presentation of C-PTSD as well as being a potential differential diagnosis. Patients with dual diagnoses of neurodiversity and C-PTSD may require specific intervention adaptations. For autism this may include specific communication strategies or recognising the sensory sensitivity.⁷⁻⁹ Dissociation may be a prominent presenting feature of C-PTSD, which creates diagnostic crossover with DID. DID should be considered in cases of severe childhood attachment trauma presenting with amnesic episodes and auditory hallucinations, which can distinguish it from C-PTSD.^{10,11}

C-PTSD and EUPD show considerable overlap in risk factors, clinical presentation, and diagnostic criteria. Research suggests that differences include C-PTSD having a more stable but negative self-concept, less severe shifts in affect, and less likelihood of engaging in self-injurious or suicidal behaviour.^{12,13}

How might C-PTSD present?

C-PTSD can present in different ways, often without patients making mention of or necessarily understanding the relevance of their underlying trauma. This means C-PTSD may be easily missed and people may present to medical services with symptoms of anxiety or depression, persistent unexplained physical symptoms, or difficulties with relationships.

People with C-PTSD may not disclose their trauma because of associated fear, shame, guilt, or stigma, such as with child sexual abuse, adult sexual assaults, and

Box 2 | ICD-11 description and diagnostic criteria for C-PTSD¹

ICD-11 description—Complex PTSD is a disorder that may develop following exposure to an event or series of events of an extremely threatening or horrific nature, most commonly prolonged or repetitive events from which escape is difficult or impossible.

Diagnostic requirements include at least one symptom from each of the following six categories:

PTSD symptoms

- Intrusions or re-experiencing of the event (such as intrusive memories, repetitive play in which the events or aspects of it are expressed, nightmares, flashbacks, distress triggered by reminders of the event or events)
- Avoidance (such as avoiding thoughts, feelings, or memories of the event or events, or avoiding people, places, conversations, or situations that are associated with the event or the events)
- Arousal and reactivity or sense of current threat (such as irritability, being overly vigilant, being easily startled, concentration problems, sleep problems)

Disturbances in self-organisation

- Problems in affect regulation (such as marked irritability or anger, feeling emotionally numb)
- Beliefs about oneself as diminished, defeated, or worthless, accompanied by feelings of shame, guilt, or failure related to the traumatic event
- Difficulties in sustaining relationships and in feeling close to others

interpersonal or domestic violence and abuse.^{12,16} They may also try to avoid re-experiencing the impact of their symptoms because of their intrusive and unpleasant nature, which can lead to a “shutting down” of their emotions or an attempt to manage them through substance misuse, eating disorders, self-harming behaviours, or somatisation.

Risk factors for C-PTSD are wide ranging. In a meta-analysis of predictive variables,¹⁷ the main risk factor identified was the experience of sexual abuse in childhood ($k=12$; odds ratio=2.880). In the UK, the Independent Inquiry into Childhood Sexual Abuse estimates that one in six girls and one in 20 boys experience sexual abuse.¹⁸ Emotional neglect in childhood, physical abuse throughout life, and being female were further risk factors. Bullying, stalking, emotional neglect, and abuse have also been found to be significantly associated with the diagnosis.¹⁹

Population prevalence rates for C-PTSD have been estimated at 1-8% with lifetime prevalence in the UK reported at 13%.²⁰ Studies in different populations indicate a prevalence of 16-38% in refugees and asylum seekers,²¹ 15% in former political prisoners,²² and 64% in Croatian veterans.²³

How do you make the diagnosis?

Consider the potential for underlying trauma to ensure that it is approached and recognised; issues may otherwise remain hidden and patients may continue to present with a variety of difficulties that arise out of their response to trauma. The role of primary care doctors and clinicians in non-mental health roles is to take a history, which allows the patient to feel their trauma has been recognised and demonstrate that the clinician is keen to understand and help them, without premature or insensitive probing into traumatic experiences before the patient is ready to disclose.

Use of the 18 item self-report International Trauma Questionnaire for PTSD and C-PTSD may be helpful to guide referral, assess severity of symptoms, and provide a baseline pre-treatment if administered at an appropriate time.²⁵



BEVERLEY CHIPP

Discussing trauma is likely to raise anxieties in patient and clinician. Patients may be concerned about re-experiencing unpleasant symptoms and the underlying trauma, as well as any associated feelings of fear and shame. Clinicians may be concerned about opening a “Pandora’s box” of difficulties with associated distress and feel uncertain about their ability to deal with this. They may also have concerns about safeguarding, and uncertainty about appropriate and available pathways of care once someone has disclosed a history of trauma and its consequences. Where possible, continuity of care and meeting with the patient on several occasions is likely to aid the formation of a trusting therapeutic relationship and enable disclosure in a safe space. Patients value care from known clinicians who understand their story and can contextualise their ongoing health needs in light of their trauma history.

Consider whether the trauma or contact with persons involved is ongoing, especially if there could be risk to the patient or vulnerable others. The person best placed to assess this is usually the patient themselves, and it is important to maintain their trust and ensure they have agency in any disclosures. Respect confidentiality but clarify who any information may be shared with going forward (box 3, see bmj.com).

Trauma informed practice seeks to recognise and respond to the potential impact of trauma on individuals’ health and wellbeing, thereby reducing the risk of re-traumatisation (box 4).

What is the treatment?

The evidence base for C-PTSD is still developing and National Institute for Health and Care Excellence guidelines are not yet available. Clinicians may consider using guidelines produced by the International Society for Traumatic Stress Studies.²⁷ This standard recommends a flexible phase based approach of:

1. Stabilisation and safety
2. Trauma processing
3. Reintegration.

Box 4 | Six principles of trauma informed practice²⁶

Safety

- Put in place measures to ensure that individuals feel emotionally and physically safe
- Consider the wider impact of your actions
- Ask what the person needs to feel safe and how you can create a safe environment for them
- Keep the person informed
- Do what you say you will do, when you say you will do it

Trustworthiness

- Be transparent and do what you say you will do
- Explain what will happen next
- Give relaxed, unhurried attention—listen effectively
- Don't over-promise—manage expectations

Choice

- Listen to what the person wants

- If there is a choice, offer it
- Explain clearly and transparently what will happen next
- Validate the person's concerns as understandable and normal

Collaboration

- Ask what the person needs
- Be clear about what will happen, and what the individual has control over and choice in—empower them where possible
- Understand local services and support agencies so that you can suggest places to go to access help

Empowerment

- Validate the person's feelings and engage with them in a non-judgmental manner
- Listen to what the person needs and ensure

they are signposted or referred to appropriate support

- Don't take over—encourage and empower the individual to take positive action themselves (with your support if they want it)

Cultural consideration

- Adopt an open, non-judgmental attitude
- Have an awareness of your own cultural values and an awareness and acceptance of cultural differences
- Consider how you can expand your own cultural awareness—familiarise with the worldviews of cultural groups other than your own
- Ask the person about their culture to understand their preferred language, how healthcare decisions are made in their family, and whether their culture prohibits any healthcare procedure or tests

The principles of trauma informed care are important in the treatment of C-PTSD across all phases (box 4). Working collaboratively with patients to develop a personalised package of care that addresses the most appropriate treatment for each person is part of best practice guidance.²⁰ Most trauma services work with a range of psychological modalities. Not all patients require a stabilisation phase²⁸ and the phases do not always unfold in a linear fashion.

Phase 1: Stabilisation and safety

Stabilisation work focuses on trauma psychoeducation, which aims to help patients understand their trauma and its potential impact. The emphasis is on the management of hyperarousal and dissociative symptoms, learning to regulate emotions, strengthening of support networks, and attending to physical health and general self-care.

Stabilisation work can be started in primary care before specialist intervention. This may include education, work on self-care and social networks, or by referral to community supports such as social prescribing. Consider the timing of when the person feels ready to begin this work. Trauma affects trust, which means that time and careful relationship building is part of any therapeutic engagement for C-PTSD.

Phase 2: Trauma processing

Trauma processing with a specialist therapist can be achieved using modalities such as eye movement desensitisation and reprocessing (EMDR), trauma focused cognitive behavioural therapy (tf-CBT), adapted psychodynamic therapy, trauma focused mentalisation therapy, and art therapy. Standalone treatments such as sensorimotor psychotherapy²⁹ or somatic experiencing³⁰ have shown promising preliminary results and evidence supports the use of body based therapies, including trauma sensitive yoga³¹ as adjuncts to talking therapies. Few direct comparisons of these modalities currently exist.

Meta-analyses of treatment trials suggest that, although trauma focused treatments such as EMDR and tf-CBT are likely to reduce PTSD symptoms, disturbances of self-organisation (DSO) symptoms may not reduce and

attrition rates are high.^{32 33} Veterans and populations affected by war showed significantly reduced effects from trauma focused treatments (EMDR and tf-CBT). Results of meta-analyses also suggest that multi component interventions, including distress tolerance and emotional self-regulatory strategies, can make trauma focused interventions in C-PTSD more effective.^{32 33}

Two multi component sequential approaches have shown positive results—skills training in affect and interpersonal regulation combined with narrative therapy (phase 2)³⁴ and dialectical behavioural therapy for PTSD.^{34 35}

Further randomised controlled trials of these interventions are needed.

Phase 3: Reintegration

Reintegration focuses on connection with others and with life in the present. This can be done through group work, both therapeutically and in the community. The interpersonal difficulties often encountered by people with C-PTSD, alongside avoidance, can lead to chronic and significant social isolation or loneliness. The reintegration phase highlights the long term nature of recovery, challenging the idea that trauma can be fixed. Instead, it focuses on the ongoing nature of the work and addresses the integration of the knowledge, skills and processing work completed in the first two phases. Social prescribing can be a helpful tool to facilitate reintegration.

Competing interests: None declared.

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EDUCATION INTO PRACTICE

- What distinguishing features would you consider when making a diagnosis of C-PTSD over PTSD?
- Can you think of patients you have seen who may meet the diagnostic criteria for C-PTSD?
- What aspects of trauma informed practice could you integrate into your care?

HOW PATIENTS WERE INVOLVED IN THE CREATION OF THIS ARTICLE

This article was written by a medical psychotherapist, an expert by experience, and a GP. The planning, writing and editing were done collaboratively. The Tavistock Trauma Service Panel (service user reference group) was also consulted, and they contributed to the resource section. The article includes personal artwork from the expert by experience.

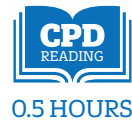
Diagnosis and management of endometriosis: summary of updated NICE guidance

Sharangini Rajesh,¹ Agnesa Mehmeti,¹ Thomas Smith-Walker,² Bryony Kendall,³ on behalf of the guideline committee

Full author details on [bmj.com](https://www.bmj.com).

Correspondence to: S Rajesh sharangini.rajesh@nice.org.uk

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 [bmj.com](https://www.bmj.com)



Endometriosis is a chronic condition where endometrium-like tissue grows outside the uterus, most commonly within the pelvis, and on organs such as ovaries, bladder, and bowel. In the UK, about one in 10 women of reproductive age (from puberty to menopause) has endometriosis.¹

The condition is associated with varied clinical symptoms, including chronic pain in the lower back and pelvis, pain while menstruating, having sex, passing urine or stool, and infertility. Some women with endometriosis may not experience any symptoms, but for others it can have a substantial impact on their quality of life. In the UK, people with suspected endometriosis wait an average of eight years for a diagnosis.² A prolonged time to diagnosis may lead to delay in appropriate management, monitoring, and disease progression.

The National Institute for Health and Care Excellence (NICE) guideline covering diagnosis and management of endometriosis was first published in September 2017. A topic update related to management of fertility as a priority was published in April 2024.³ This article summarises recently updated recommendations, specifically focusing on factors associated with time to diagnosis, including imaging, for those working in primary care.

WHAT YOU NEED TO KNOW

- A positive history in a first degree relative increases the likelihood of developing endometriosis
- Do not exclude the possibility of endometriosis if transvaginal ultrasound scan is normal and history is suggestive
- Both transvaginal ultrasound and pelvic magnetic resonance imaging should be considered for diagnosis and assessment of the extent of deep endometriosis

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 development group's experience and opinion of what constitutes good practice. Evidence levels for the recommendations are in the full version of this article on [bmj.com](https://www.bmj.com).

History

This is a new recommendation. When assessing a person with signs and symptoms of endometriosis, the likelihood of developing endometriosis is higher if there is a history of the condition in a first degree relative.

- Ask if any first degree relatives have a history of endometriosis, as this increases the likelihood of endometriosis.

Ultrasound

The updated recommendations considered an evidence review from 20 studies that assessed diagnostics of endometriosis, which showed transvaginal ultrasound scan had moderate to high sensitivity (70% to 100%, very low to high quality of evidence) and high specificity (94% to 100%, moderate to high quality of evidence) for detection of deep endometriosis across a range of sites, including bowel, bladder, ureter, and ovaries (including endometrioma) (table, see [bmj.com](https://www.bmj.com)). Although superficial endometriosis is the most common type of endometriosis, this subtype was not included in the recommendation as it is difficult to diagnose with transvaginal ultrasound or any other imaging tests accurately.



The strength of the recommendations related to performing transvaginal ultrasound scan in primary care has been upgraded from a weak "consider" recommendation in the previous guideline to a strong "offer" recommendation. Although the sensitivity and specificity are operator dependent, most non-specialist sonographers would be able to identify ovarian endometriomas, and possibly cases of deep endometriosis. Furthermore, an early transvaginal ultrasound scan may rule out other pathology such as fibroids or malignancy.

When a patient declines transvaginal ultrasound or it is otherwise not suitable, transabdominal scan is an alternative. In one prospective cohort study of 40 women with suspected endometriosis, transabdominal ultrasound showed high sensitivity (91%, low quality evidence) and moderate specificity (75%, very low quality evidence) in detection of deep endometriosis in the ovaries.⁶ Evidence from the same study showed that transabdominal ultrasound to identify deep endometriosis in the uterosacral ligaments showed low sensitivity (25%, low quality evidence) and high specificity (97%, low quality evidence).

Suspected endometriosis

Summary of updated NICE guidance

The NICE guidance on diagnosis and management of endometriosis (<https://www.nice.org.uk/guidance/ng73>) was updated in November 2024, aiming to reduce time to diagnosis through better advice on imaging in primary care. This graphic summarises the advice developed by NICE on diagnosis, highlighting the main changes in orange

 Orange boxes show changes between the new (2024) and previous (2017) NICE guidance
 Guidance unchanged



First presentation

Women Trans men
 Non-binary people registered female at birth

with one or more of

- Chronic pelvic pain
- Deep pain during or after sexual intercourse
- Period related pain (dysmenorrhoea) affecting daily activities and quality of life
- Period related or cyclical gastrointestinal symptoms, in particular, painful bowel movements
- Period related or cyclical urinary symptoms, in particular, blood in the urine or pain passing urine
- Infertility in association with 1 or more of the above

The term "internal vaginal" is now included, to make patients aware that this will be offered

Changed from "not appropriate" to clarify that it is not just the health professional that makes this decision

Discuss

- Provide information about endometriosis, including how diagnosed and criteria for referral
- Individual support needs
- Keeping a pain and symptom diary

Consider

- Family history of endometriosis
- People express pain in different ways

Investigations and initial management

Do not use pelvic MRI or CA-125 to diagnose endometriosis

Whilst arranging investigations, start pain management

Abdominal and pelvic internal vaginal examination + **Transvaginal ultrasound now offered to all patients**

If pelvic examination is **declined or not suitable** for the person, offer an **abdominal examination** to exclude abdominal masses

If above scan is **declined or not suitable** for the person, consider a **transabdominal ultrasound scan** of the pelvis

Do not exclude the possibility of endometriosis if the abdominal and/or pelvic examinations or ultrasound are normal

Young people aged 17 and under

If one or more of the following is suspected or confirmed:

Endometrioma

- Deep endometriosis including that involving the bowel, bladder, or ureter
- Endometriosis outside the pelvic cavity

Initial treatment is not effective, is not tolerated, or is contraindicated

- Initial management fails
- Persistent and recurrent symptoms
- Daily life impact
- Pelvic signs

Refer to (was consider referring)

Paediatric and adolescent gynaecology service

Refer to

Specialist endometriosis service

Refer to (was consider referring)

Gynaecology service

Specialist management

Specialist transvaginal ultrasound scan or pelvic MRI scan to diagnose deep endometriosis, assess its extent, and to guide treatment decisions

Now applies to all deep endometriosis, not just involving the bowel, bladder, or ureter

Consider laparoscopy even if ultrasound or pelvic MRI scan is normal

Record the findings, including intra-operative imaging

Disclaimer	Validation This infographic is not a validated clinical decision aid	Updating This information is provided without any representations, conditions, or warranties that it is accurate or up to date	Responsibility BMJ and its licensors assume no responsibility for any aspect of treatment administered with the aid of this information	Risks Any reliance placed on this information is strictly at the user's own risk
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- Offer a transvaginal ultrasound scan to all women or people with suspected endometriosis, even if pelvic or abdominal examination is normal, to:
 - Identify ovarian endometriomas and deep endometriosis, including that involving the bowel, bladder, or ureter
 - Identify or rule out other pathology which may be causing symptoms
 - Guide management options and enable referral to an appropriate service, depending on the ultrasound findings.
- This ultrasound scan should be organised by the person's general practice.
- If a transvaginal ultrasound scan is declined or not suitable for the person, consider a transabdominal ultrasound scan of the pelvis.

Referral criteria

These updated recommendations for referral criteria to secondary care services were based on the guideline committee's experience only, and were made following consensus.

Superficial or microscopic endometriosis will not be identified by ultrasound scan in all cases, and diagnostic accuracy of ultrasound is operator dependent. Therefore, do not exclude endometriosis if an ultrasound scan is negative and there is clinical suspicion, and refer for further investigations even after a normal scan.

The recommendation related to referring to secondary care gynaecology services was strengthened from "consider" to "offer" referral, as women or people with suspected or confirmed endometriosis meeting criteria will need referral by general practice for further investigations and management. The recommendation related to referring to tertiary specialist endometriosis services directly was amended to include suspected or confirmed endometrioma as one of the criteria, in addition to deep endometriosis. Endometriomas are often associated with deep or severe endometriosis, and their management can be particularly complicated, especially if fertility is a consideration. For young women or people (aged 17 and under) with suspected or confirmed endometriosis, the strength of the recommendation was upgraded from "consider" in previous guidelines to "refer" in the updated one.

During assessment in primary care, people presenting with pain and symptoms of endometriosis should receive treatment with analgesics, neuromodulators, neuropathic pain treatments, or hormonal treatment, as appropriate, while further investigations or referrals are underway.³

- Do not exclude the possibility of endometriosis if the abdominal or pelvic examination and ultrasound scan are normal, and recognise that referral may still be necessary even with a normal scan.
- Refer women or people with symptoms of, or confirmed, endometriosis to a gynaecology service (see the recommendation on gynaecology services) for further investigation and management if:
 - Initial treatment is not effective, is not tolerated, or is contraindicated, or
 - They have symptoms of endometriosis which have a detrimental impact on activities of daily living, or



HOW PATIENTS WERE INVOLVED IN THE CREATION OF THIS ARTICLE

Anna Cooper, Emma Cox, and Sunaina Nechel-Maher are lay members of the guideline committee and contributed to the formulation of the recommendations summarised in this article. All were involved in the development and reviewing of this article, to ensure lay and patient perspectives were considered and included.

GUIDELINES INTO PRACTICE

- How do you assess a person with suspected endometriosis?
- What factors do you use to decide if a patient needs referral to gynaecology or a specialist endometriosis service?
 - They have persistent or recurrent symptoms of endometriosis, or
 - They have pelvic signs of endometriosis, but deep endometriosis is not suspected.
- Refer women or people to a specialist endometriosis service if they have suspected or confirmed:
 - Endometrioma, or
 - Deep endometriosis, including that involving the bowel, bladder, or ureter, or
 - Endometriosis outside the pelvic cavity.
- Refer young women or people (aged 17 and under) with suspected or confirmed endometriosis to a paediatric and adolescent gynaecology service, or specialist endometriosis service (endometriosis centre) for further investigation and management.

Pelvic magnetic resonance imaging (MRI) scan

Currently, ultrasound is the primary investigation for diagnosis, and MRI is used for diagnosis and assessment of the extent of deep endometriosis and to guide treatment decisions. In these updated recommendations, both pelvic MRI and transvaginal ultrasound performed and interpreted by specialists in secondary care, including sonographers, should now be considered for the diagnosis and assessment of the extent of deep endometriosis.

An evidence review of 10 new studies was undertaken, which showed that diagnostic ability of MRI ranged from low to high sensitivity (39% to 100%, very low to moderate quality evidence) and moderate to high specificity (80% to 100%, very low to high quality evidence) for diagnosing deep endometriosis in various sites, including ovaries, vagina, rectosigmoid, rectovaginal septum, uterosacral ligaments, and bladder. Based on the evidence review for transvaginal ultrasound scan, when performed in the secondary care setting it could also be used for the diagnosis of deep endometriosis.

- Consider specialist transvaginal ultrasound scan or pelvic MRI scan to diagnose deep endometriosis and assess its extent.
- Ensure that specialist transvaginal ultrasound scans and pelvic MRI scans are planned and interpreted by a healthcare professional with specialist expertise in gynaecological imaging.

Competing interests: See bmj.com.

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WHAT YOUR PATIENT IS THINKING

Collaboration is key in managing endometriosis



0.5 HOURS

Heather Guidone describes how endometriosis affected many aspects of her life and how collaboration in care is key

My journey with endometriosis started with severe menstrual cramping, irregular and heavy bleeding, and significant gastrointestinal distress and urinary dysfunction. What initially seemed like “bad periods” quickly became something much more disruptive, and as time went on my symptoms escalated. Debilitating, chronic non-menstrual pelvic pain began to dominate my days. Lower back and leg pain and excessive fatigue became a constant presence. Later, painful intercourse and infertility emerged as challenges.

Over time, these symptoms took an increasing toll on my physical and mental health and wellbeing. Endometriosis

was affecting everything from my earnings capability to my reproductive choices, self-esteem, and body image.

Despite the persistence and severity of my symptoms, it was years before anyone linked them to endometriosis, and I was routinely assured my pain was “normal.” Following diagnosis and treatment through laparotomy, scant additional options were offered for management.

Think beyond menstruation

Healthcare professionals often treat endometriosis as just a “bad period.” My experience was that fertility was emphasised over pain relief, and pregnancy was “prescribed” as though it were a treatment. This came at a time when I was struggling with infertility linked to



ALISSA THALER

endometriosis. Treatment was approached in a one-size-fits-all manner that didn't align with my needs, and health professionals did not engage me in conversations about my symptoms and goals. I was left feeling disempowered and unheard, compounding the isolation that already comes with living with a chronic, poorly understood disease like endometriosis.

I would encourage health professionals to reflect on how to provide a truly patient centred approach. Listen without judgment. Consider a patient's personal goals and daily challenges when discussing diagnostic and treatment options. Try to understand that endometriosis affects so much more than just the reproductive organs.

Working together

After decades of pain, more than 20 surgeries, and countless drug therapies,

I finally connected with a specialist who changed everything. Combining excision surgery and postoperative collaboration with specialists in pain management, gastroenterology, urology, and pelvic health physical therapy, they devised a comprehensive care plan tailored to my needs and treatment directed goals. This brought immediate, dramatic, and longlasting relief.

The path ahead lies in patient-physician collaboration to achieve the best possible outcomes for this complex, chronic illness. We must work together to dispel the persistent culture of misinformation and societal biases against endometriosis pain and symptoms, and ultimately prioritise the expertise of the real authorities on endometriosis: those living with the disease.

Patient author
Heather@centerforendo.com

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WHAT YOU NEED TO KNOW

- Think beyond menstruation. Endometriosis is not just a “bad period” and can affect many aspects of a patient's physical and mental wellbeing
- Endometriosis manifests differently in each patient; treatment plans must be tailored to individual needs, preferences, and life circumstances
- Interdisciplinary care and collaboration are key, with patients themselves holding important insights into how best to manage their condition and support others

EDUCATION IN PRACTICE

- How do you address the patient's personal goals and daily challenges in your approach to diagnosis and management of endometriosis?
- How might you ask a patient living with endometriosis about their mental wellbeing?

ENDGAMES

SPOT DIAGNOSIS

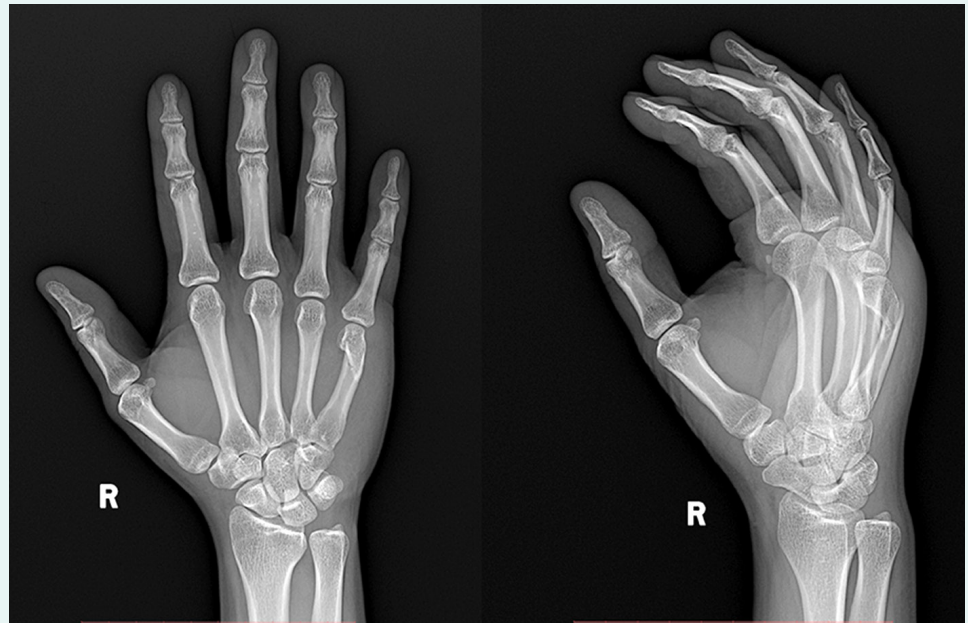
A swollen right hand

A man in his 30s presented to the emergency department after becoming intoxicated and striking the ground with his right fist. He reported pain, swelling, and limited movement around his right fifth finger. Examination showed swelling and bruising of the right fifth distal metacarpal, accompanied by marked tenderness. There were no skin abrasions or neurovascular compromise. The range of motion in the other joints was normal. Radiographs were obtained during the initial evaluation (figure).

Submitted by Jiatian Li, Bei Xu, and Tuo Yang

Patient consent obtained.

Cite this as: *BMJ* 2025;388:e083088



Anteroposterior and lateral radiographs of the right hand at time of presentation to the emergency department

If you would like to write an Endgames article, please see our author guidelines at bit.ly/29HCBAL and submit online at bit.ly/29yyGSx

answers

SPOT DIAGNOSIS A swollen right hand

The radiographs show a fracture of the right fifth metacarpal neck, with the distal fragment angulated towards the radial and palmar sides (figure), commonly referred to as a boxer's fracture. The term is derived from the typical mechanism of injury involving direct trauma to a clenched fist. However, it is more frequently observed in patients after a punch or from punching a hard object, rather than in experienced boxers. This condition represents 10% of all hand fractures, and is five times more common in men than in women. Boxer's fracture can negatively affect grip strength and dexterity, both of which are crucial for daily tasks and athletic activities. If not treated properly, boxer's fractures in younger individuals may result in malunion or non-union, especially given their active lifestyles.

Most boxer's fractures can be treated conservatively. Fractures without substantial angulation, malrotation, displacement, or an open wound can be managed conservatively by splinting the metacarpophalangeal joint in a flexed position. When applying the splint, make sure that the metacarpophalangeal joint is at the level of the proximal finger crease. Closed reduction is required when the angulation is greater than 30°. Fractures that are open, severely comminuted, malrotated, or involve neurovascular injury might need surgical intervention.

LEARNING POINTS

- A boxer's fracture is a fifth metacarpal neck fracture that commonly occurs after striking a hard object, such as a wall or the ground, with a clenched fist.

- Most boxer's fractures can be treated conservatively with closed reduction if the angulation is greater than 30°. During immobilisation, the metacarpophalangeal joint should be splinted in a flexed position to prevent ligament shortening and loss of mobility.

- Surgical intervention is recommended for fractures that are open, comminuted, or where this is malrotation or neurovascular injury.

PATIENT OUTCOME

Manipulative reduction, followed by casting and splinting immobilisation, was performed in the emergency department. At six week follow-up assessment, radiographs showed that the radial angulation had been corrected. Mild residual volar angulation was present, which is not uncommon after these injuries. Despite this, functional limitation is rare. The fracture had healed well and the immobilisation was removed. The patient did not experience any complications, and the fifth metacarpophalangeal joint and finger had full range of motion.



0.5 HOURS

You can record CPD points for reading any article. We suggest half an hour to read and reflect on each.



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