# education

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

## Atrial fibrillation ablation and outcomes

The CABANA trial looked at whether ablation for atrial fibrillation reduces mortality compared with drug therapy, and found that it didn't.

In two simultaneous reports on the trial, which randomised more than 2000 patients, ablation improved quality of life (using quality of life scores specific for atrial fibrillation) and reduced cardiovascular hospital admissions. But with these two outcomes comes the warning that the trial was unblinded. Staff and patients knew what intervention the patients had, and this has an undeniable impact. The absence of blinding skews those outcomes, and thus the true effect of ablation has not been measured. The lesson is that interventional trials, like drug trials, require placebo control with double blinding.

► JAMA doi:10.1001/jama.2019.0693, doi:10.1001/jama.2019.0692

#### Three dimensional fetal hearts

These researchers developed an open source, motion correction technique for imaging the fetal cardiovascular system with magnetic resonance imaging (MRI) and assessed it in 85 cases. It is intended for use in pregnancies with a fetus with known or suspected congenital heart disease. The researchers found it was reliable (using echocardiography as the standard), and the visual and diagnostic quality were better than the two dimensional, uncorrected MRI. In particular, the vascular structures could be seen better, and in 10 cases the technique identified anatomical features that weren't previously known about. This could provide useful information in preparation for the birth and postnatal care.

Lancet doi:10.1016/S0140-6736(18)32490-5

#### Antithrombotic regimens for AF

For treatment of cardiovascular disease, the base drug is usually aspirin. For acute coronary syndrome or stenting, this usually gets topped up with clopidogrel, ticagrelor, or, less commonly, prasugrel. But if the patient has atrial fibrillation, they will also need anticoagulation. Should they be given warfarin or the "xabans"? Dual or triple therapy? The AUGUSTUS trial elegantly used 2×2 factorial design to address both questions.

More than 4000 patients were randomised to apixaban or a vitamin K antagonist (which was open label) and to either aspirin or matched placebo (which was double blinded). And they all received a P2Y12 inhibitor such as clopidogrel. The strategy with the best outcomes was a P2Y12 inhibitor and apixaban without aspirin.

▶ N Engl J Med doi:10.1056/NEJMoa1817083

#### Cardioversion for recent onset symptomatic AF

Pluymaekers and colleagues randomised 437 patients with recent onset atrial fibrillation to early or delayed cardioversion in a non-inferiority trial. The delayed approach was non-inferior for restoration of sinus rhythm. This is a really useful practical result for the medical community. Spontaneous conversion was common, and if this happens then electrical cardioversion is avoided, which is preferable.

This study allays fears that not cardioverting early on, and thus remaining longer in atrial fibrillation, might be bad because electrical cardioversion might be less effective at restoring sinus rhythm at a later stage. Cardioversion was just as effective at the later stage in terms of the proportion of patients achieving sinus rhythm. The authors explain that the theoretical risk of stroke in the period of delay to cardioversion is probably mitigated by the use of anticoagulant therapy.

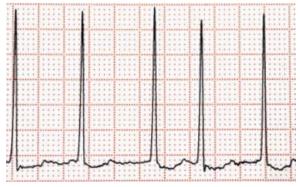
N Engl J Med doi:10.1056/NEJMoa1900353

#### A new era for aortic stenosis

Surgical aortic valve replacement has been trumped by transcatheter valve replacement for low risk patients in the PARTNER 3 trial and the Evolut Low Risk Trial. PARTNER 3 looked at the balloon expandable valve. In this non-inferiority randomised trial of 1000 patients, the headline finding was the much lower rate of death, stroke, or rehospitalisation (which together formed the primary endpoint) in the transcatheter group. The transcatheter group also had less atrial fibrillation and shorter hospital stays.

Follow-up was for a year, which is reasonable for a mortality assessment, but patients will also be interested in the longevity of their new valve. The Evolut Low Risk trial looked at the self expanding valve. The primary endpoint was death or disabling stroke. Again, it was non-inferior to surgical valve replacement.

• N Engl J Med doi:10.1056/NEJMoa1814052, doi:10.1056/NEJMoa1816885



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#### PRACTICE POINTER

## Undescended testis

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Undescended testis or cryptorchidism is a common congenital anomaly affecting about 2-8% of boys in population studies in Europe. <sup>1</sup> In the UK, about 6% of boys have an undescended testis at birth. <sup>2</sup>

Timely referral and surgical correction may improve fertility and reduce the malignancy rate associated with undescended testes.<sup>3</sup> This article advises the non-specialist on evaluation of newborns and infants for undescended testis and current recommended practice in management.

#### How do patients present?

Testicular position is usually assessed in boys at newborn and 8 week checks. Parents may present with concerns about their child's genitalia. A few patients present at a later age if the diagnosis was missed earlier or with the development of an ascending testis. Box 1 describes a classification based on site of undescended testis on examination.

Risk factors include earlier gestational age (<37 weeks' gestation) or low birth weight (<2.5 kg), with either equating to a doubling of risk. <sup>26</sup> Other risk factors include a family history of undescended testis, associated hormonal disorders such as congenital adrenal hyperplasia or disorders of sex development, and previous inguinal hernia surgery or orchidopexy. The Personal Child Health Record or "red book" is a useful source for the personal history and initial newborn examination findings.

#### WHAT YOU NEED TO KNOW

- Examine testicular position in newborn boys and at 8 weeks old to identify undescended testis
- Review at 3 months of age to check for spontaneous descent of testes; if still undescended refer to a surgeon
- Urgently refer children with bilateral impalpable testes, penile abnormalities, or ambiguous genitalia to a tertiary paediatric centre
- There is no role for pre-referral radiological imaging in children with undescended testes
- Orchidopexy (surgical correction to reposition the testis) is ideally done between 6 and 18 months of age





See http://learning. bmj.com for linked learning module

#### How should I examine the child?

Explain to the parent that you will examine the child's genitalia as part of the newborn or infant examination. Ask them to comfort the child while he is examined. Expose the child from umbilicus to knees. It is best to examine the child in the supine and frog-legged position on the examination table or parent's lap.

Careful inspection is often enough to confirm descended testes without any palpation. Note any abnormalities such as penile abnormalities, ambiguous genitalia, or redness (which may suggest acute testicular torsion if accompanied by pain).

Most (70-80%) undescended testes are palpable, felt during the sweeping manoeuvre from lateral to medial in the inguinal canal (fig 1). An undescended testis is determined when the testis cannot be manipulated, tension-free, into the base of the scrotum. A retractile testis can be manually manipulated to the base of the scrotum but re-ascends after manipulation. Palpate with warm hands. Kneeling to the patient's right side, start palpation with your left hand placed lateral to the deep inguinal ring. Press down with your left hand moving it along the inguinal canal to the pubic tubercle to "milk" the testis down the inguinal canal. This will overcome the cremasteric reflex which may naturally draw the testis away from the scrotum during the examination. Once the left hand is at the pubic tubercle, determine the location of the testis with your right hand and pull it down gently to the scrotal base. Repeat the same process to locate the contralateral testis.

#### Box 1 | Classification of undescended testis

- True undescended testis—The testis lies along the expected path of descent but has never been present in the scrotum
- Ectopic testis—The testis is palpated in a location outside the normal path of descent, such as the perineum or femoral area
- Ascending testis—A previously descended testis that no longer lies within the scrotum. This has a peak incidence around 10 years of age and affects 1-2%.<sup>4</sup> It may also occur as a complication of inguinal hernia surgery in children<sup>5</sup>

#### Box 2 | Red flags that should prompt urgent referral



- Undescended testes with penile abnormality (such as hypospadias)—Consider disorders of sex development
- Bilateral impalpable testes or ambiguous genitalia—Need to exclude endocrinology abnormalities, including congenital adrenal hyperplasia that is associated with life threatening electrolyte disturbances
- Pain with or without erythema—Consider acute testicular torsion

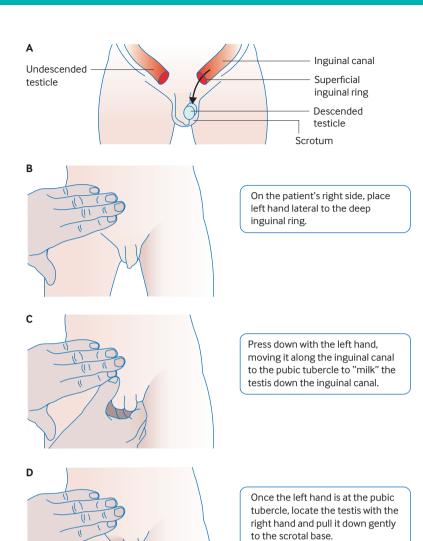


Fig 1 | The expected path of descent of the testis (A) is via the inguinal canal into the scrotum. For palpation of an undescended right testis, place your left hand lateral to the deep inguinal ring (B). Press down with your left hand, moving it along the inguinal canal to the pubic tubercle to "milk" the testis down the inguinal canal (C). Once the left hand is at the pubic tubercle, determine the location of the testis with your right hand and pull it down gently to the scrotal base (D)

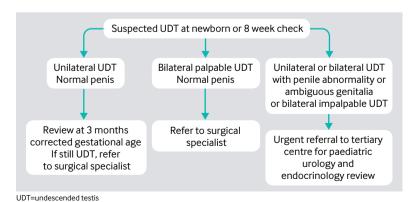


Fig 2 | Referral pathway for unilateral and bilateral undescended testis (adapted from American Urological Association guideline, <sup>7</sup> British Association of Paediatric Surgeons commissioning guide, <sup>8</sup> and National Institute for Health and Care Excellence (NICE) recommendation <sup>9</sup>)

#### When should I refer the patient?

Box 2 lists red flags on examination that warrant urgent referral to a tertiary paediatric centre for paediatric urology and endocrinology review.

In newborns with unilateral palpable or impalpable undescended testis and no other abnormality, arrange a review at 3 months of age to re-examine the child. Explain to the parent that this would allow for natural descent of the testis. In a prospective cohort study in the UK (784 male infants) the incidence of undescended testis decreased from 6% at birth to 2.4% at 3 months of age due to further descent of the testis postnatally. Refer patients with undescended testis at 3 months of corrected gestational age and older children to a surgeon. Figure 2 describes referral pathways for unilateral and bilateral undescended testis.

#### What investigations are required?

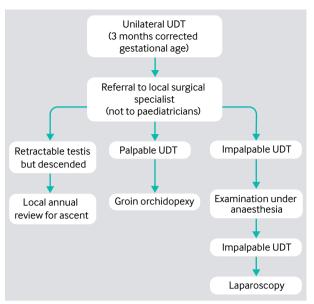
There is no role for routine or preoperative imaging for undescended testis. <sup>8</sup> The findings of preoperative imaging do not influence surgical management. In addition, two meta-analyses investigating the use of ultrasonography <sup>10</sup> and magnetic resonance imaging (MRI) <sup>11</sup> to detect non-palpable undescended testes have found low sensitivity (45% for ultrasound, 62% for MRI) and poor reliability in accurately localising testes. They conclude a lack of benefit for diagnosis of undescended testis. A retrospective analysis at our institution over three years identified 40% of 169 paediatric patients who required surgery for undescended testis had prereferral imaging. This meant that 169 ultrasound scans (£111 per scan) and five MRI (£352 per scan) were unnecessarily performed. <sup>12</sup>

Other tests such as testicular biopsy and hormonal tests, if required, will typically be done by a specialist.

#### How is it treated?

As most boys have a palpable undescended testis, an open groin orchidopexy is performed to reposition their testis in a sub-dartos scrotal pouch. Orchidopexy is usually undertaken as a day case procedure under general anaesthesia. International guidelines recommend surgery between 6 and 18 months of age based on testicular biopsy results and testicular volume outcomes.<sup>8 13</sup> A recent meta-analysis found no difference in testicular atrophy and complication rates following orchidopexy before and after 1 year of age.<sup>14</sup>

Patients with an impalpable undescended testis are re-examined under anaesthesia to confirm it is still not palpable. If it is still impalpable, then laparoscopy is undertaken to ascertain what definitive procedure should be performed. Figure 3 describes the surgical pathways for management of unilateral undescended testis. Hormonal treatment with human chorionic gonadotrophin or gonadotrophin releasing hormone is not routinely done because of concerns about future spermatogenesis. <sup>15</sup>



UDT=undescended testis

Fig 3 | Surgical algorithm for unilateral undescended testis (adapted from American Urological Association guideline<sup>7</sup> and British Association of Paediatric Surgeons commissioning guide<sup>8</sup>)

Early complications include operative site bruising, infection, and wound dehiscence. Later complications include testicular atrophy (up to 5% for a palpable undescended testis, 10-15% for intra-abdominal undescended testis) and testicular re-ascent requiring revision surgery (1% for palpable undescended testis, 10% for intra-abdominal undescended testis). 16-18

The incidence of testicular cancer is approximately 6.9 per 100 000 men. <sup>19</sup> With timely surgery, the potential testicular malignancy risk is 2.9 times the baseline prevalence for adult men. Regular testicular self examination is advisable once the child reaches adolescence. <sup>20</sup> In a historic cohort of boys who underwent orchidopexy between 1955 and 1971, paternity rates were lower in the group who had had bilateral undescended testis (62%) compared with those who had had unilateral undescended testis (89%) and the unaffected population (94%). <sup>21</sup> There is good evidence that earlier surgery improves testicular volume, but the potential fertility benefits from this are still unknown. <sup>22</sup>

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### HOW PATIENTS WERE INVOLVED IN THE CREATION OF THIS ARTICLE

We asked parents of patients at our practice who had had prereferral imaging about their thoughts regarding imaging. Their experiences of having an investigation that was not necessary and possibly mis-informative resulted in this article.

#### **EDUCATION INTO PRACTICE**

- How might your current referral pathway for patients with undescended testis (including time of referral and use of radiological imaging) be modified on the basis of this article?
- Think about the last time you examined a child for testicular position. How might you alter your examination next time?

#### WHAT YOUR PATIENT IS THINKING

## Can you cartwheel with an ostomy?

**Karin Camposagrado** discusses how healthcare professionals have helped her adjust to life with an ileostomy

t might seem odd, but not being able to cartwheel after my surgery was one of my biggest concerns as I contemplated a total colectomy and an ileostomy. The answer from everyone I asked was "you can do anything with an ostomy that you did before you had one." This belief paved the way for me to confidently choose to have ostomy surgery.



An ostomy diverts waste (stool or urine) from the body into an ostomy pouch. My ostomy diverts stool from my small intestine into my ostomy pouch. To me, knowing that I could do anything that I could before the operation was the solution to a huge problem.

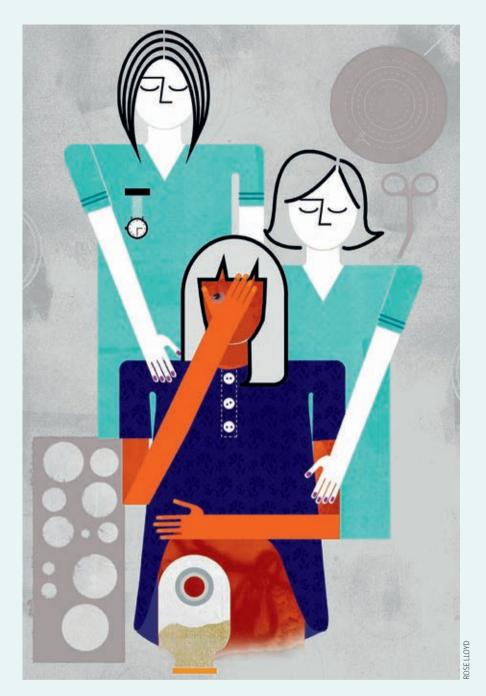
Once the surgery was complete, I began to worry about trying new foods, exercising and building my strength back up, getting diarrhoea and becoming dehydrated, pooping while changing my pouch, whether my clothes would ever be comfortable again. But more than anything I worried about leaks and how to handle them.

#### Simple advice

The nurses helped by encouraging me to look at my stoma. Even though I wasn't ready to do that and resisted, they were gently persistent and eventually I agreed to take a peek. It was a lot to take in, but I appreciated that they encouraged me to start by just looking and didn't

#### WHAT YOU NEED TO KNOW

- Encourage your patients to challenge themselves, whether it is taking a peek at what you are doing or having them be hands-on, doing it themselves
- Sometimes just knowing you are there if patients need help can make them feel more comfortable self managing
- For patients with an ostomy, treatment decisions will depend on their symptoms and the impact these have on their daily life. Knowing what is normal for them will help with decision making



ask me to do a full pouch change right away. Later that day my worst fears were realised, when my pouch leaked. The nurse recognised that I wasn't ready to change the pouch myself, but she still encouraged me to watch her at work.

It was my turn before I knew it. My home health nurse assured me she was there to guide me, answer my questions, and support me. During one of the changes I started pooping while my appliance was off. I started to panic and my legs began to shake. I wanted to cry as I looked to the nurse for guidance. She told me that it would stop, but to take a deep breath and wait a moment.

I got through that change because of her quiet confidence in me along with her patience and acceptance. Just knowing that she would support me without judgment made me feel confident in doing the changes. In hindsight, her advice was simple. In the moment, it made everything click.

#### **Explaining to others**

I've since been to numerous appointments, many of which have been with healthcare professionals who do not have much—if any—experience with ostomies. Although information about my ostomy is in my medical

#### **EDUCATION INTO PRACTICE**

- What information and expertise can you draw on when helping patients weigh up the pros and cons of having ostomy surgery?
- In the first few days after ostomy surgery how could you better support someone to take in their appearance and the changes to their body?
- See one, do one, teach one is a common mantra for mastering clinical skills and procedures. How do you support patients to learn the skills needed to master essential aspects of self care or management after a procedure such as an ostomy?
- When consulting people with an ostomy, how and when might you bring it up? To what extent do you use adapted language such as "output"?

chart, I often still mention this in initial meetings to make sure that everyone is aware of it. For me, having healthcare professionals who are curious about my ostomy is comforting. I'm more at ease when they adapt their bowel related questions to what it would be like for an ostomate.

For example, instead of asking "how many times do you poop per day," ask "have you noticed any changes in your output recently?" This helps me know that you recognise that what is normal for me will be different from that of your other patients. I also feel more relaxed with healthcare professionals who recognise that I've taken the time to educate myself about my ostomy by listening to my concerns and being willing to consider my perspective as the patient. This makes me feel much more confident to work with them to find solutions to any problems.

People might think that having an ostomy will affect their life negatively. But for me, living with an ostomy has enhanced my life both physically, socially, and emotionally. This isn't to say that it's not a challenge sometimes, but I'm grateful for the life it's allowing me to live.

As a part of my healing process, I started the website and blog www.newbieostomy.com. It is filled with information about ostomies and is curated with the intention to spread positive ostomy awareness and education. Another great resource for ostomy information is www.ostomy.org

Competing interests: KC is a consultant for Safe n Simple and 11 Health

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#### **CLINICAL UPDATES**

## Social prescribing

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Non-medical interventions are increasingly being proposed to address wider determinants of health and to help patients improve health behaviours and better manage their conditions. 12 This is known as social prescribing. In England, the NHS Long Term Plan states that nearly one million people will qualify for referral to social prescribing schemes by 2023-24.3 Primary care networks, announced as part of the 2019 GP contract, will be funded to employ one social prescriber each from 2019.4 The social prescribing approach is also attracting interest in North America,35 Australia,6 and Scandinavia.<sup>7</sup> This clinical update outlines what social prescribing is, the evidence behind it, and offers some tips for embedding social prescribing within healthcare systems.

#### Why social prescribing is gaining support

- Increasing evidence shows that social factors such as education, income, and housing influence health behaviours and have a major impact on health.
- We need to rethink the balance between the biomedical and the social and psychological model of care in clinical practice.<sup>10</sup>
- Interest is growing in a more personalised approach to healthcare delivery, with more effective partnerships between patients and professionals.
- Social prescribing is presented as an effective way of addressing social determinants of health while potentially reducing healthcare demand and costs.<sup>3</sup>

#### WHAT YOU NEED TO KNOW

- Emerging evidence suggests that social prescribing can improve people's health and wellbeing and reduce workload for healthcare professionals and demand for secondary care services
- In England social prescribing is part of the NHS Long Term Plan. Primary Care Networks will be funded to employ a social prescriber from 2019
- Social prescribing is targeted at a range of patients, including those who are socially isolated and those with long term physical and/or mental health conditions
- Social prescribers have a variety of names that include link worker, community connector, community navigator, and health trainer. The role varies from simple signposting to activities to more intensive and sometimes longer term individual support
- Further research is needed to identify who is most likely to benefit from social prescribing and what type of intervention is most cost effective



#### What is social prescribing?

Socioeconomic factors have consistently been found to have a greater impact on health than healthcare.8 In addition, frailty and long term conditions can negatively affect social and physical activity, finances, and relationships, which in turn can lead to a further decline in health and wellbeing. 49 The underlying hypothesis is that addressing these factors through providing a range of social activities and interventions is as important as addressing biomedical issues (box, left). 11 Social prescribing does this by linking traditional clinical practice with activities and support services within the community. A "social prescription" is a referral to one or more of these activities, which are typically provided by the local voluntary and community sectors. Referral mechanism, target groups, activities offered, and the intensity and duration of support provided vary.

#### Is there evidence social prescribing works?

A systematic review indicated current evidence is insufficient to provide definitive guidance on what works. <sup>12</sup> Evaluating social prescribing schemes can be challenging because of the complex and wide ranging issues it seeks to address, wide variations in the nature of interventions, the wide range of additional influences on individual health and wellbeing, the time taken for benefits to emerge, and the expense of thorough evaluation. <sup>13</sup> Many current evaluations are small scale, short term, poorly designed, lack standardised outcome measures, and fail to account for wider influences on health and wellbeing. <sup>12</sup>

However, the lack of robust evidence of effectiveness does not mean social prescribing is ineffective. Findings from qualitative studies suggest that patients are satisfied with social prescribing schemes, particularly



Care planning or opportunistic

Identification of patient with potential to benefit from social prescribing
Introduce social prescribing to patient. Provide a full explanation of service
After gaining consent, patient details passed to link worker

Referral to link worker

Patient contacted by link worker to arrange an initial meeting
Face-to-face patient and link worker meeting (apporx 1 hour)

Personalised goal identification and realistic target setting

Minimal support

Moderate support

High support

Social

prescribing

Direct access to services with initial induction and regular review

Personalised programme and intensive review

Stages in referral to a link worker

valuing a trusting and supportive relationship with their link worker, the time and space to address social problems, and link workers' extensive knowledge of the range of community support services available. 14-17 Recent systematic reviews of non-clinical community interventions identified evidence, albeit weak, of a further range of patient benefits. 12 18 These include improvements in mental wellbeing and in physical health and health behaviours; reductions in social isolation and loneliness; and reductions in primary and secondary care usage. Systematic review evidence from the US on patients' social and economic needs supports the effectiveness of interventions aimed at identifying and addressing families' resource needs and of programmes providing linkage to employment support for certain vulnerable groups. 19

#### How could the evidence be improved?

To aid evaluation, social prescribing programmes need to be underpinned by a clear understanding of the intended impacts, the mechanisms by which impacts are achieved, and how each programme fits into wider health and social care systems and the communities in which it operates.<sup>16</sup> The Choice and Personalisation Team at NHS England has recently produced a draft common outcomes framework for discussion. 20 This proposes a common approach to measuring outcomes for the person (for example, being better able to manage their own care), for the health and care system (a change in the number of GP consultations or hospital episodes), and for local community groups (capacity to manage referrals). Measuring these outcomes is not straightforward and will require further work if a robust evidence base is to be developed. Mixed methods research that integrates qualitative and quantitative approaches is likely to capture the context and range of outcomes necessary to develop evidence and learning about social prescribing services.21

## HOW PATIENTS WERE INVOLVED IN THE CREATION OF THIS ARTICLE:

A group of patients from Ways to Wellness have read this article. Although patients have been heavily involved in the development of and continuing review of Ways to Wellness, 38 none of those who read the article felt able to comment on the wider aspects of social prescribing discussed in this article.

#### What are the risks and harms of social prescribing?

There is a risk that social prescribing is treated as a panacea for complex problems and social issues such as loneliness, poverty, and increasing inequalities. While social prescribing is likely to be of benefit to many patients, it may not be appropriate for people with end stage disease or severe mental illness. Social prescribing also risks being viewed as a "silver bullet" to fix the pressures of growing demands facing health services. The primary driver needs to be benefit to patients.<sup>22</sup> In addition, if the link worker model (described below) is to be rolled out, some critical issues need to be addressed. For example, what are the role's core competencies, and should there be an accredited qualification?<sup>23</sup> Should the role always be paid, or could it be performed by volunteers or by a mix of both? Should link workers be managed within the health or the voluntary sector?

Finally, it is important to recognise wider social policy contexts within which social prescribing is delivered, specifically the constraints on the UK's voluntary and community sectors imposed by a prolonged period of austerity and the impact of reductions in local authority budgets between 2010 and 2018.24 This, coupled with growing demand for services, may make it more difficult to refer patients into community activities because of limited local capacity. Against this backdrop, balancing funding for link workers and activities requires planning by commissioners, service designers, and the voluntary and community sectors. Giving link workers a brief to generate local activities and a limited budget to spot purchase some activities is an option, but local circumstances will dictate the best model.

#### Social prescribing in practice

#### Who are the target groups for social prescribing?

A key target group is patients who may require a greater level of social and emotional support to improve wellbeing and health than is available in routine care. The social prescribing scheme that we have developed, "Ways to Wellness," targets people with a range of long term physical and mental health conditions living in an area of high socioeconomic deprivation. <sup>25</sup> Other schemes target people with mental health conditions, <sup>26</sup> or frail older people. <sup>26</sup>

Different people will require different levels of support to engage with activities. At one end of the scale, someone with a high level of health literacy and motivation will find out and do all that needs to be done without any support. At the other end of scale, someone who is feeling overwhelmed or depressed may need intensive personal motivational support. In between, others may need signposting and information about the range of support and activities available.

#### What sort of activities do people get involved in?

Our initiative in Newcastle upon Tyne, north east England, offers more than 180 different activities, many of which are no cost or low cost. Activities and services can be roughly grouped into: physical activities (such as "green gyms" and exercise classes); weight management and nutrition; arts based activities; employment based and volunteering activities; and support to access welfare rights, debt, and housing advice and advocacy services. Some social prescribing interventions provide free, time limited activities (for example, providing six weeks' free exercise classes).<sup>27</sup>

#### Who provides social prescribing services?

Social prescribing services can be provided by the voluntary sector, <sup>25 28</sup> primary care practices acting as hubs for local community wellbeing, <sup>29</sup> or by partnerships between health service commissioners and the voluntary sector. <sup>28</sup>

#### Who can make a social prescribing referral?

Patients can self refer to social prescribing schemes, or be referred by a clinician or other member of the healthcare team. The referral may be directly to an activity, such as physical exercise, or to a link worker. Self referral to digital social prescribing is also being developed; for instance, patients can use an app that matches them with non-medical activities that may benefit their health condition.<sup>30</sup> In the UK, referrals from generalist clinicians working in the community are most common, but referral can also be from specialist services, for instance for people recovering from cancer<sup>31</sup> or those with early dementia.<sup>32</sup>

#### What is a link worker?

People who accept referrals and provide support for social prescribing in the UK are known by a variety of titles, including community navigator, health trainer, social prescribing coordinator, and community connector. However, "link worker" is an increasingly popular title because it references the need for a link between referring clinicians, patient, and local voluntary and community

#### EMBEDDING SOCIAL PRESCRIBING INTO YOUR WAY OF WORKING

These tips are drawn from our experience in developing a link worker social prescribing scheme.

- Build links with your local voluntary and community sector. A good starting point is the National Association for Voluntary and Community Action<sup>35</sup>
- Discuss social prescribing with your patient participation group. They may have ideas about how to take it forward and champion it in the practice
- Decide which patient group(s) to target. Focusing on a particular area may be helpful; for example, patients with long term conditions such as type 2 diabetes, socially isolated patients, or those with anxiety and depression
- Consider adding a social prescribing option to annual care plans, health checks, or frailty reviews as part of care and support planning<sup>36</sup>
- Talk to other local practices and identify a local lead who can support people into activities. From April 2019

- the GP contract includes funding for a social prescriber within each primary care network  $^{134\,37}$
- The whole practice team needs to plan how to encourage patients to take up the offer of a social prescription
- Provide patients with a full explanation of the social prescribing programme offered. This has been found to help manage patient expectations of the service and increase their satisfaction<sup>15</sup>
- In partnership with link workers or the organisation dealing with referrals, clarify and agree referral criteria and feedback mechanisms. Develop a referral form that collects basic patient data and patient consent to share information. Consider how the practice will collect feedback from referred patients<sup>20</sup>
- Plan how you are going to evaluate your social prescribing service from the outset

#### **EDUCATION INTO PRACTICE**

- Think about which of your patients might benefit from seeing a link worker who could link them into local community and voluntary sector services.
- What social issues do you often feel unable to help patients with that might be addressed with the help of a link worker?
- How would you evaluate whether your social prescribing scheme is accessible, helping patients, and cost effective?

sectors. The figure shows the stages in referral to a link worker. In the UK, this approach is gaining traction, particularly in disadvantaged communities where problems are more complex and challenging and more intensive support is likely to be required.<sup>33</sup>

Key aspects of the link worker role include: working with patients to identify meaningful goals; co-producing an action plan with the patient; enabling access to activities and sources of support in the community, and providing ongoing motivational support to help patients achieve their goals. In some schemes, link workers also work with clinicians to generate social prescribing referrals and provide feedback to referring clinicians on patients' progress. Ideally a link worker is someone with community connections and an in-depth knowledge of sources of community activities and support. An understanding of the local community is particularly crucial in areas of socioeconomic disadvantage, as the link worker role may also involve generating and building capacity in the local voluntary and community sectors to provide a wide range of local activities. The recent NHS Long Term Plan for England includes the aim to recruit more than 1000 trained social prescribing link workers by the end of 2020-21, with a further increase by 2023-24.

Competing interests: Chris Drinkwater is chair of Ways to Wellness.

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Find the full version with references at http://dx.doi.org/10.1136/bmj.l1285

#### **CASE REVIEW**

## Multiple eruptive ulcers in a patient with quiescent ulcerative colitis

A 65 year old man with ulcerative colitis presented with a one week history of rapidly expanding, painful, necrotic ulcers over the lower limbs, perineum, and peristomal skin. He had no bowel symptoms. Eighteen months earlier he had undergone a subtotal colectomy and stoma formation. His ulcerative colitis was then in remission and he had been treatment free since then.

On examination he was pyrexial and drowsy with a Glasgow coma scale of 14/15. His stoma was functioning well. Multiple purple edged ulcers with central slough (fig 1) affected large areas of both legs as well as a 10×5 cm area in the right groin. There was also a peristomal ulcer surrounding the entire stoma site. Blood results are shown in the table.

- 1 What is the diagnosis?
- 2 What is the link between this condition and inflammatory bowel disease?
- 3 What are the treatment options for this condition?

Submitted by Angela Tewari, Asif Mahmood, and Christopher Harland

Patient consent obtained.

Cite this as: *BMJ* 2019;364:l847





Blood results		
Test/unit	Result	Normal range
C-reactive protein /mg/L	200	<4
White cell count/×10 <sup>9</sup> /L	15	4-11
Neutrophil count/×10 <sup>9</sup> /L	14.1	1.5-8

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Broad spectrum antibiotics and high dose corticosteroid therapy resulted in a substantial clinical improvement. After the addition of mycophenolate mofetil, the ulcers healed with cribriform scarring over the course of three months, and the patient will remain on mycophenolate mofetil for six months.

#### **ЭМОЭТИО ТИЗІТА**Я

gangrenosum at the stoma site can occur anywhere from two weeks to three years after stoma formation.

- Onset of peristomal pyoderma
- can be the most severe

  It is linked with UC in 30-60% of cases
- Ulcerative pyoderma gangrenosum involves rapidly evolving ulcerations with typical well defined violaceous borders
   It is the most common form of PG and
  - LEARNING POINTS

.eseful in local disease.

and/or immunosuppressants.9

The anti-inflammatory action of antibiotics (eg, minocycline, doxycycline) may help to reduce the cytokine influx and inhibit neutrophil function, as well as offering antibacterial properties. Dapsone (an anti-inflammatory and antimicrobial compound) can also be useful.

Topical super potent steroids may be

condition?
High dose steroids (intravenous, oral) and/or immunosuppressants.<sup>9</sup>

#### 3 What are the treatment options for this

The cytokine profile in patients
with ulcerative colitis is a risk factor,
regardless of bowel status, and pyoderma
gangrenosum may develop after total or
subtotal colectomy and in the absence of
symptoms of ulcerative colitis.

occurs less commonly with Crohn's

gangrenosum cases are associated with ulcerative colitis. <sup>12</sup>
Around 2-8.5% of patients with ulcerative colitis<sup>4.5</sup> may develop pyoderma gangrenosum. The condition pyoderma

Approximately 30-60% of pyoderma gangrenosum cases are associated with

## 2 What is the link between this condition and inflammatory bowel disease?

as small papules and rapidly evolves. It is often misdiagnosed as infection or vasculitis. Wound cultures are often negative initially; however, after skin preakdown these wounds are subject to secondary infection.

gangrenosum. Pyoderma gangrenosum typically starts

1 What is the diagnosis?
Painful rapidly growing ulcers on a background of ulcerative pyoderma consistent with ulcerative pyoderma gangrenosum and peristomal pyoderma

Multiple eruptive ulcers in a patient with quiescent ulcerative colitis

CASE REVIEW



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#### **MINERVA**

#### Stevens-Johnson syndrome in systemic lupus erythematosus

A 13 year old girl—diagnosed with systemic lupus erythematosus (SLE) three years earlier—developed painful, round, erythematous plaques over her extremities, trunk, and face (figure). These progressed to erythema multiforme and epidermal necrosis.

Keratinocyte vacuolar degeneration on biopsy showed Stevens-Johnson syndrome (SJS).

She was also diagnosed with Rowell syndrome, a rare subtype of SLE characterised by SLE, erythema multiforme, speckled ANA positive, positive anti-SSA/Ro, and anti-SSB/La.

Autoimmune disease is an uncommon cause of SJS. More common causes include antibiotics, anticonvulsants, herpes simplex virus, and mycoplasma.

Treatment of SJS includes plasma exchange, haemoperfusion, corticosteroids, mycophenolate mofetil, and intravenous immunoglobulins.

Jing Lu; Lijuan Zhang; Xiaomei Sun; Zheng Wang (wangzhenghuaxifuer@163.com), Key Laboratory of Birth Defects and Related Diseases of Women and Children, Sichuan University, China



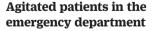
Parent/patient consent obtained.
Cite this as: *BMJ* 2019;364:l1257

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## Dog ownership and cardiac health

A few years ago, a nationwide study from Sweden showed that people who kept dogs were less likely to have cardiovascular disease. The link was put down to the extra time spent in walking and the psychological benefit of the companionship dogs provide (*Sci Rep*). But it's beginning to look like wishful thinking. Further investigation

showed that dog owners were more likely to need treatment for hypertension and dyslipidaemia than people who didn't have dogs (*BMJ Open* doi:10.1136/bmjopen-2018-023447). The earlier findings may have been biased because employment status and chronic non-cardiovascular comorbidities hadn't been taken into account.



It's sometimes necessary to treat acutely agitated patients in emergency departments with antipsychotic drugs—partly to stop them harming themselves and others and partly so that they can be properly examined. A retrospective survey of 16 000 people given such treatment in the US finds that intramuscular injections

of haloperidol, droperidol, or olanzapine were the most commonly used drugs (*J Emerg Med*). There wasn't much to choose between them in terms of effectiveness, although repeat injections were needed more often after haloperidol than after droperidol or olanzapine.

## ECG in suspected pulmonary embolism

Classic electrocardiogram (ECG) abnormalities in patients with pulmonary embolism include P pulmonale, right axis deviation, and an S1Q3T3 pattern. However, a retrospective study from a hospital in Scotland reports that these features occur in only a small percentage of cases. Right bundle branch block, atrial arrhythmias, and clockwise rotation were more frequent, but they were also common in controls without pulmonary embolism (*Postgrad Med J*).

## Bright light for people with Parkinson's disease

Depression and insomnia are frequent in people with Parkinson's disease. A possible explanation is that both are caused by neurodegeneration in central sleep regulatory areas and by disrupted circadian rhythms. Small trials of short duration suggested that light therapy was helpful in resetting daily rhythms, but a larger study finds no benefit (*Neurology*). Among 83 people with Parkinson's disease

and major depressive disorder, bright light treatment (10 000 lux for 30 minutes twice each day for three months) proved no better than a sham device in reducing depressive symptoms.

#### Aspirin and warfarin

Unless there's a good reason, such as a having a replacement mechanical heart valve or a recent myocardial infarction, people taking warfarin for atrial fibrillation or venous thromboembolism shouldn't be taking aspirin as well. A registry study from six anticoagulant clinics in Michigan found that more than a third of people taking warfarin were also receiving aspirin in the absence of a positive indication (JAMA Intern Med). Risk of bleeding, emergency department visits, and hospitalisation was increased in those taking both drugs compared with those taking warfarin alone, while rates of thrombosis were similar.

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