CASE REPORT

Management of opioid painkiller dependence in primary care: ongoing recovery with buprenorphine/naloxone

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SUMMARY

Opioid painkiller dependence is a growing problem and best-practice management is not well defined. We report a case of a young woman exhibiting dependence on codeine, originally prescribed for myalgic encephalopathy, after escalating use over a 10-year period. In 2012, a consultation with a new general practitioner, who had extensive experience of patients with substance abuse, revealed the underlying dependence. After building trust for 6 months, she was able to admit to medication abuse, and was referred to the community drug and alcohol team. On presentation to the team, the patient had no pain issues and the dihydrocodeine use—600 tablets/week—solely reflected her dependence. The patient successfully underwent rapid induction with buprenorphine/naloxone as opioid substitution treatment over 2 days. She is currently stable, engaged with recovery support services and psychosocial counselling, and has just returned to work. She is maintained on a therapeutic dose of buprenorphine 10 mg/naloxone 2.5 mg.

BACKGROUND

As the global consumption of opioid painkillers increases, there is growing concern about the degree of prescription opioid misuse and the parallel increase in largely unintentional overdose deaths.[1–4] In the USA, the rate of prescription opioid overdose and death has reached epidemic proportions, and the US Department of Health and Human Services is attempting to address this growing problem through a major programme that includes prevention (improved prescribing decisions) and treatment (a focus on effective treatment and functional recovery).[5] In the UK, the trend in deaths from prescription opioids is similar to the USA—increasing numbers of deaths from prescription opioid overdose that now exceed those from illicit drugs—but there is a paucity of data describing the extent of opioid painkiller dependence (OPD).[4 6] Although the precise scale of opioid-related harm is unknown, the increasing number of deaths suggests that patients with problem opioid use are not being identified in primary care, and in some cases, clinical management may not be optimal. There are few guidelines on how to identify and manage OPD—the UK guidelines on opioid dependency date from 2007 and are mostly concerned with illicit drug use,[7 8] and the vast majority of studies describing the efficacy and safety of opioid substitution treatment (OST) are derived from studies of illicit drug users. We present a case of a young woman with OPD who was identified in primary care by her general practitioner (GP) and for whom ongoing substitution treatment with psychosocial support has proven effective.

CASE PRESENTATION

A young woman in her mid-20s was first prescribed codeine/paracetamol (30 mg/500 mg) taken as two tablets four times a day in 2002 for generalised aches and pains (putative diagnosis: myalgic encephalopathy). During the next 4 years, she slowly escalated her consumption to twice the recommended dose and exhibited signs of psychological dependence—obsessive intrusive thoughts about obtaining her drug of choice, harmful use compulsion, loss of interest in other pursuits, loss of social function and fear of lacking medication.

Following the death of a parent in 2008, she rapidly escalated her codeine use, acquiring from friends and relatives, and also purchasing some off the street. She consumed orally as many tablets as she was able to acquire and ran out of her monthly prescription within 2 weeks. She became intensely medication-seeking from her own GP, including out of hours, as well as from the local accident and emergency department. Frequently, the patient presented at multiple sites, claiming a variety of reasons for having run out of her medications. At this point, she became aware of physical dependence on opioids, experiencing opioid withdrawal (shivers and aches) within 6–8 h of not taking any codeine-containing medications. Physical dependence would have been emphasised by codeine's relatively short half-life, causing rapid swings in opioid levels. As such, she exhibited similar behaviour to heroin-dependent individuals.

In 2012, a consultation with a new GP, who had extensive experience of patients with substance abuse, revealed the underlying dependence. After building trust for 6 months, the patient was able to admit to medication abuse, and she was referred to the local community drug and alcohol team. At this time, the GP changed her medication from paracetamol-containing preparations to dihydrocodeine (DHC) in order to reduce consumption of paracetamol as part of a harm-reduction strategy, and began careful monitoring and reduced prescribing to encourage her to engage with the local community drug and alcohol team. On presentation to the team, the patient had no pain issues and the DHC use—600 tablets/week—solely reflected

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her dependence. There were ongoing issues with low mood and diazepam use and occasional misuse. Following urinalysis results on two separate occasions that confirmed the presence of morphine, a treatment plan was formulated. A goal of complete abstinence of all opioid-based medication other than the prescribed OST was proposed and the patient began treatment.

TREATMENT

The patient was taking about 85 tablets/day, comprising some 30 mg and some 40 mg DHC tablets. On the basis of an estimated equivalence between 10 mg DHC and 1 mg morphine, it was calculated that the patient was consuming approximately 2940 mg of DHC per day, which was equivalent to 294 mg of morphine and roughly equivalent to 196 mg methadone.

Buprenorphine/naloxone was chosen for OST. On the first day of treatment in withdrawal, the patient received an initial dose of buprenorphine/naloxone 4 mg/1 mg and had a clinical opiate withdrawal scale (COWS) score of 6 after 30 min. A second dose of buprenorphine/naloxone 4 mg/1 mg was administered at midday and by mid-afternoon she was experiencing discomfort, with a COWS score of 11, but little objective evidence of precipitated withdrawal. Repeated reassurance was given throughout the afternoon of the first day. On day 2, the patient was given buprenorphine/naloxone 16 mg/4 mg and was reported as comfortable. The patient was reviewed 2 weeks after initiation of buprenorphine/naloxone; urinalysis revealed the presence of buprenorphine but not morphine, confirming that no opioids other than OST were being used. Gwent Open Access Local Service (GOALS) provided psychological support that included the patient meeting with her keyworker every week to address anxiety issues, access to cognitive behavioural therapy, and a range of diversionary activities with peer mentoring. The patient was also signposted to 12 steps fellowship.

OUTCOME AND FOLLOW-UP

The ongoing recovery plan involved maintaining the buprenorphine 16 mg/naloxone 4 mg dose for at least 6 months, and when ready, to initiate a slow and closely monitored dose reduction. A mixture of buprenorphine/naloxone and buprenorphine may be used for dose reductions, allowing small incremental decreases of 0.4 mg; patients are often considerably anxious about reducing their medications and tolerate slow reductions best. The patient had returned to work maintained on a therapeutic dose of buprenorphine 14 mg/naloxone 3 mg. With very gradual dose reduction, she is currently stable on 10 mg/2.5 mg.

DISCUSSION

There are remarkably few data or published cases on the treatment and management of OPD. Most clinical trials have assessed the role of OST and support services in illicit drug, mainly heroin, users, with little data on patients with prescription painkiller dependency, who represent a distinct population of opioid abusers.

Reviewing this case identifies a number of important issues around OPD prevention, diagnosis and management. Clearly, appropriate prescribing of opioid painkillers is an important consideration in primary care and monitoring of excessive opioid prescribing now forms an important part of the response to the opioid crisis in the USA.[2] Assessment of risk for developing opioid dependence prior to opioid dependence includes reviewing the patient's personal and family history of addiction, of mental health problems and their social circumstances. When a patient exhibits signs of OPD, healthcare providers may fail to identify OPD[9] due to a lack of routine screening in primary care clinics and an inadequate appreciation of this disorder and the severity of addiction.[10] In our case, the diagnosis was missed until a GP with prior addiction experience recognised the underlying disorder and instigated a plan to retain and engage the patient in a treatment plan before the patient came under the care of the drug and alcohol team.

For this patient using medium strength opioids in excessive quantities, OST is playing an important role in helping her to recover. Buprenorphine/naloxone was chosen as OST rather than methadone for several reasons: titration to a sufficient dose of methadone would have taken many weeks to perform safely, during which time concomitant opioids would have been required to prevent withdrawal; the final high dose of methadone required could have posed an overdose risk to the patient—in non-tolerant individuals, a methadone dose as low as 30 mg can result in fatal respiratory depression; and there was an additional risk of QT prolongation at higher doses of methadone.[11]

Like methadone, buprenorphine and buprenorphine/naloxone have been shown to decrease hospital admissions, morbidity and mortality. With a better safety profile than methadone in overdose due to its ceiling effect on respiratory depression, lower abuse potential, fewer symptoms of withdrawal when discontinued, lack of association with QT prolongation, and greater clarity of thought and associated cognitive functioning, buprenorphine/naloxone is a valuable treatment option in patients with OPD.[12]

Patient's perspective

"I spent years being miserable and the co-codamol helped me to get through the day. But I was caught in a trap and did not know how to get out of it; I thought there was nowhere to go and nothing could help me. Since taking the Suboxone tablets, I feel normal again and am back working. I have got my life back, something I thought could never happen."

Learning points

- Consumption of opioid painkillers has increased markedly in developed countries and the degree of prescription opioid misuse parallels the increase in largely unintentional overdose deaths.
- When a patient exhibits signs of opioid painkiller dependence (OPD), primary care physicians may not recognise the disorder and may underestimate the severity of the addiction and the consequences of inaction; general practitioner education on how to identify OPD could be beneficial.
- For those dependent on very high opioid doses, titration to a sufficient dose of methadone can pose an overdose risk and transfer to methadone over an extended time frame can be challenging.
- Buprenorphine/naloxone is an established substitution treatment and is a valuable treatment option in patients with OPD.
- For all forms of opioid substitution treatment, a recovery programme based purely on pharmacological intervention is rarely sufficient—a combination of pharmacotherapy, recovery support services and psychosocial counselling works best.

The rapid induction achievable with buprenorphine/naloxone and its clinical effectiveness make it suitable for use by general medical and mental health practitioners, thereby increasing patient access to substitution treatment.

For all forms of OST, a recovery programme based purely on pharmacological intervention is rarely sufficient—a combination of pharmacotherapy, recovery support services and psychosocial counselling works best. As highlighted by our case, GP awareness of OPD facilitates the best response achieved through a combination of pharmacotherapy, recovery support services and psychosocial counselling.

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