CASE STUDY

Intranasal abuse of prescription hydrocodone/acetaminophen results in oronasal fistula: A case report

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ABSTRACT

Opioids are becoming more common in the treatment of chronic nonmalignant pain. With increased availability of opioids for chronic pain we may expect an increased misuse of these as analgesics as well. The authors describe the case report of a young woman with chronic back pain and intranasal abuse of prescribed hydrocodone/acetaminophen who was diagnosed after presenting for hypernasal speech and foreign body in the nose. This case report highlights the need for vigilance on the part of the physician for any aberrant drug-related behaviors. Any unusual symptoms or signs such as hypernasal speech, chronic nasal infection, or unexplained foreign body sensation in the nose should be thoroughly investigated.

Key words: intranasal opioid use, drug abuse, hydrocodone

INTRODUCTION

Opioids are becoming more common in the treatment of chronic nonmalignant pain (CNMP).[1] Although most patients take their oral opioid medications for chronic pain as prescribed, a small number of patients have been found to misuse their opioid medications in a number of ways.[2] In the past decade, intranasal drug abuse has presented with increasing frequency of cocaine as the prototypical drug of intranasal abuse.[3] Intranasal opioid abuse has been less frequently described but may result in similar nasal and oral pathology (nasal congestion and infection, erosion of intranasal structures) as from cocaine abuse.[4] We describe the case report of a young woman with chronic back pain and intranasal abuse of prescribed hydrocodone/acetaminophen who was diagnosed with opioid abuse after presenting for hypernasal speech and foreign body in the nose.

CASE REPORT

A 27-year-old woman with a history of chronic low back pain resulting from a motor vehicle collision presented with a history of hypernasal speech and feeling of a foreign body in the nose. She denied any facial pain. She gave a history of a car crash 5 years before presentation with onset of low back pain. The back pain became chronic in nature and was not helped with nonopioid analgesics. She was prescribed oral hydrocodone of 7.5 mg/acetaminophen of 500 mg three times daily for the treatment of back pain for several years, and during the last year, increased to four times daily. Physical examination of the head and neck revealed an obvious oronasal fistula (Figure 1) of the soft palate and she was thus scheduled for surgery to remove a possible foreign body in the nose. The remainder of the physical examination was otherwise unremarkable. At surgery, the patient was found to have an oronasal fistula of the soft palate with an obvious foreign body in the nose. This foreign body (Figure 2) turned out to a mass of hydrocodone pills with inflammatory tissue. This pill mass was removed and the patient recovered uneventfully. She rated her postoperative pain as 5/10 on a numeric pain rating scale, which was easily treated with a small dose of Lortab elixir. She was discharged home and underwent a palatoplasty several months later for surgical correction of her oronasal fistula.

The patient's previous medical history was significant for the history of chronic low back pain treated with "oral" hydrocodone tablets for several years duration. When the cause of the oronasal fistula was discovered to be snorting of opioid tablets, the patient gave a history of snorting hydrocodone tablets, but denied doing so within 3 years of diagnosis. She also gave a history of bulimia treated with counseling and

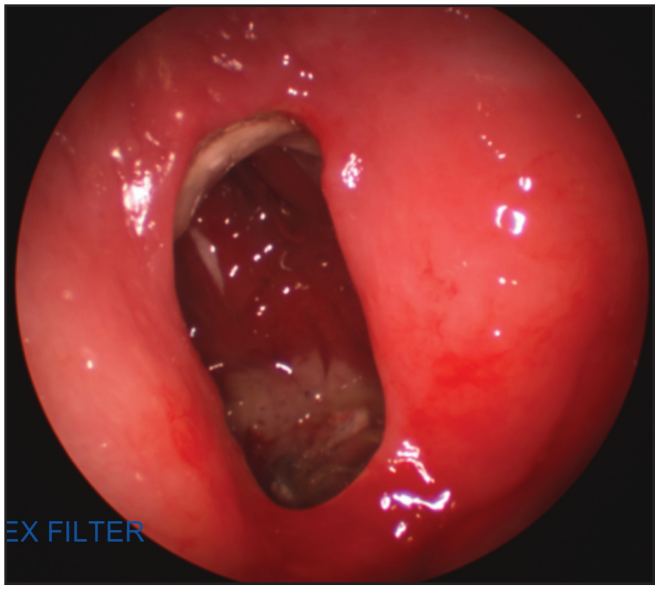

Figure 1. Oronasal fistula of the soft palate looking up into the nose from the mouth cavity.

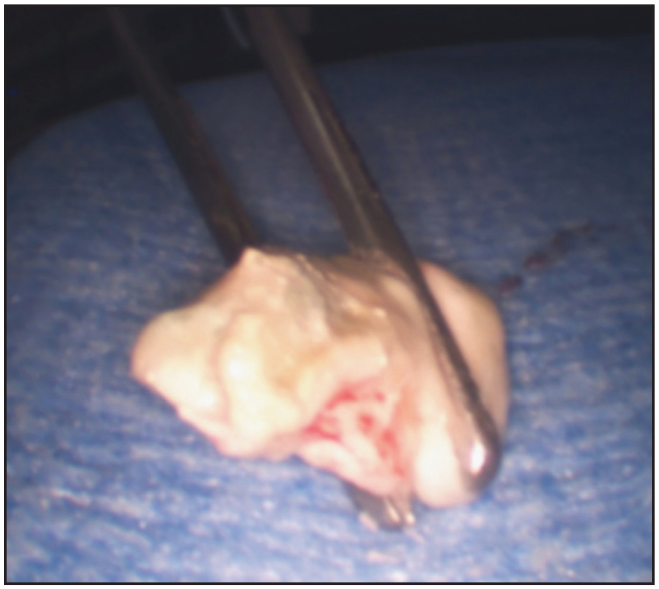

Figure 2. Foreign body (hydrocodone pills with inflammatory mass) removed from the nose.

alprazolam 1 mg twice daily. She smoked 5 cigarettes daily and denied alcohol use. She denied the use of street drugs. Her family history was negative for substance abuse. She was allergic to penicillin and amoxicillin. Her only other medical history was for genital herpes treated with valacyclovir and a remote history of dysfunctional uterine bleeding.

DISCUSSION

We report a case of prescription opioid abuse diagnosed when our patient presented for evaluation of foreign body sensation in the nose. Snorting of centrally acting drugs has traditionally been associated with cocaine and amphetamine use; however, the incidence of snorting oral opioids prescribed for presumed legitimate purposes seems to be on the increase.[5] A recent article described 5 cases of intranasal opioid (hydrocodone) abuse, of which 4 patients abused multiple opioids, and 2 of the cases also snorted cocaine.[6] Our patient denied street drug use and a urine drug screen had not performed. The drug of abuse for our patient was also hydrocodone which has been the most prescribed opioid in the past decade.[7]

Chronic oral opioids have been used in the treatment of cancer pain with great efficacy for the past 40 years,[8] and this success has led to increased use of chronic opioid therapy for patients with CNMP.[9] However, the use of chronic opioid therapy for CNMP remains controversial and has been associated with an increase in prescription opioid misuse.[10] One risk factor for misuse of prescription opioids is a previous history of psychopathology.[11,12] Our patient did have a history of bulimia which may have been a warning, in retrospect, that she was not an ideal candidate for chronic opioid therapy. It seems physicians should be able to identify chronic pain patients who abuse their therapy; yet, a recent study showed that physicians greatly underestimated the percentage of patients in their practice who tested positive for illicit street drug use on urine drug screening.[13] Our patient had been treated at an outside facility for chronic pain and had not been subject to any urine drug testing at this location. We strongly recommend routine random and intermittent, urine drug testing for all patients on chronic opioids for CNMP. Such urine drug testing may have identified our patient who was misusing prescription opioids before physical injury to the nasopharynx.

Recent clinical guidelines for the appropriate use of chronic opioid therapy in patients with CNMP recommend that all patients considered for chronic opioid therapy receive a complete assessment of risk of substance abuse including history, physical examination, and urine drug screening.[10] It is unknown whether our patient received urine screening before her start of opioid therapy for the treatment of back pain or whether she had a history of drug abuse. Using the Opioid Risk Tool[14] she had risk factors of young age and a history of psychological disease (bulimia) but apparently denied use of street drugs or

alcohol. If patients are determined to obtain opioids from their physician, it is not unreasonable to assume that some may lie about previous substance abuse personal history. Screening tools provide only one incomplete measure of the likelihood of prescription opioid abuse and all patients should now be followed with random and regular urine drug screening to ensure compliance with the prescribed medication and that they are not taking illegal street drugs.

Opioids can be an effective pain therapy in a subpopulation of chronic pain patients if carefully selected and continually monitored. However, opioids may be diverted or misused by the patient and safe opioid therapy presumes that physician prescribers have detailed clinical skills and knowledge to treat and monitor patients on chronic opioid therapy. Recent guidelines for the use of chronic opioids in the management of CNMP recommend that clinicians consider using a written "informed consent" with each patient.[10] This "contract" helps open discussion of expectations from both the patient and the physician as to what is acceptable behavior in the use of prescription opioids for chronic pain. Our patient had been treated at an outside facility without the use of such an agreement. This case report highlights the need for vigilance on the part of the physician for any aberrant drug-related behaviors. Any unusual symptoms or signs such as hypernasal speech, chronic nasal infection, or unexplained foreign body sensation in the nose should be thoroughly investigated. A urine drug screen should be completed to search for other opioid or street drug use. Patients found to be abusing prescription opioid medications should be referred to specialized centers dealing with patients addicted to opioids.

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