GUEST EDITORIAL

What can we learn from baseball's steroid scandal?

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Pain journals and professional organizations have devoted much attention recently to the increasing intrusion of the Drug Enforcement Administration (DEA) into the practice of pain medicine.[1] Little attention, however, has been given to the role of clinicians—as the sole licit source of opioid analgesics—in inviting this intrusion. As we watched Major League Baseball (MLB) come under intense congressional and media scrutiny this year for its handling of the steroid abuse problem, it prompted us to look at medicine's issues with chronic opioid therapy in a somewhat different light. This editorial contains a few of our observations.

Self-reports of drug use, no matter how convincing and who they're from, are of limited value. Baltimore Orioles superstar Rafael Palmeiro testified this past spring before the US House Committee on Government Reform, convened to investigate steroid misuse in baseball. Under oath, Palmeiro jabbed his finger at the panel, swearing, "Let me start by telling you this: I have never used steroids. Period. I don't know how to say it any more clearly than that. Never." So convinced was the committee of Palmeiro's verity that they appointed him to spearhead Zero Tolerance, an outreach program designed to keep our nation's children off steroids. The children would have been especially receptive to this squeaky clean superstar, because over the summer, Palmeiro became only the fourth player in baseball history to collect 3,000 hits and 500 home runs. The plan was quickly scuttled, however, when Palmeiro was suspended and fined for a random drug screen that demonstrated the presence of an anabolic steroid, stanozolol, in his urine. Despite incontrovertible evidence to the contrary, Palmeiro, like virtually all players who fail drug tests, maintained his innocence.

Similarly, self-reports of opioid and other drug abuse are unreliable in our patient population.[2] Yet, in managing patients on chronic opioid therapy, physicians depend almost entirely on patient self-reports. Patients who display aberrant behaviors are easy to identify, but many patients who abuse or divert their opioids—the "professionals"—are able to get their act together for the 10 minutes every month (or every few months) that they spend in our offices, and are adept at being seen as "model" patients.

There is indeed a problem, the magnitude of which remains to be determined, but is probably bigger than previously thought. Until recently, and despite occasional player reports to the contrary, MLB maintained that it had no drug problem, merely a few bad apples. In 2003, after congressional threats, MLB and the Players Association amended their collective bargaining agreement to include anonymous survey testing. Knowing that testing would be conducted, and with methods unable to detect the new designer steroids and other performance-enhancing substances, 5 to 7 percent of players tested positive for steroids, automatically triggering a new disciplinary testing policy for the 2004 season.

The lifetime prevalence of substance use disorders in this country is estimated to be 15 percent.[3] A reasonable inference would be that the prevalence of substance use disorders in the population of patients on chronic opioid therapy is at least as high, and the available literature indicates that this might be the case.[4,5] A related issue is that for each of several popular prescription opioids—morphine, oxycodone, fentanyl, hydrocodone, and hydromorphone—the number of prescriptions written increased every year from 1994 to 2001, and in most cases, so did the ratio of illicit to licit use.[6] While there are many sources for illicitly obtained prescription opioids, we must consider the likelihood that a significant, although indeterminate, percentage originates from our prescription pads.

There is no profile for drug abusers. Drug testing in baseball has revealed some unexpected findings. Long thought to be manna only for the gargantuan home-run hitters like Mark McGwire and Barry Bonds, we now know that steroid abusers fit no profile. This season has seen steroid-related suspensions of pitchers, base-stealers, superstars, and even benchwarmers—all looking to get an edge.

Likewise, opioid and other drug abuse in society and in our practices is nondiscriminatory, blind to social, racial, educational, economic, and gender lines. Physicians cannot make assumptions about substance abuse based on demographic factors.

Testing is essential. It is inconceivable that the drug problem in MLB could have been fully understood or seriously addressed without drug testing. A few vocal players have been complaining for years about the prevalence of steroid abuse in the locker room, to no avail. This year, Jose Canseco's book, *Juiced: Wild Times, Rampant 'Roids, Smash Hits, and How Baseball Got Big* (which, incidentally, identified Palmeiro as a steroid abuser), was dismissed as the ranting of a publicity hound. Only with the establishment of drug testing has the problem begun to be seen as credible. Clearly, the proof is in the urine—yet, physicians do not test. Recent data indicate that less than 10 percent of primary care physicians who prescribe chronic opioid therapy for their pain patients use urine-based drug testing (UDT).[7]

Failure to address drug abuse results in government involvement. MLB, unlike most other sports, has long been viewed as not taking its drug problem seriously. Their testing program has been seen as weak, and their penalties even weaker. Unlike track and field, for example, in which a positive UDT results in a two-year ban from international competition, MLB's "five strikes and maybe you're out"-type policy has been seen as a wink and a nod to the players who fill the stands (and the owners' pockets), resulting in congressional scrutiny and threats of legislative action.

Likewise, physicians have not faced up to the breadth of drug abuse in our chronic opioid population. Drug testing, when done at all, is generally used in the face of aberrant behavior to weed out and banish problem patients from our practices. With our busy schedules and our sensitivity about giving offense, patients who cause no problems tend to be the beneficiaries of a laissez-faire policy (i.e., absence of aberrant behaviors means absence of testing). Yet, there is evidence that the absence of aberrant behaviors is not a reliable indicator of absence of substance abuse.[8] And, like that of the MLB, our problem has piqued the interest of government agencies. Unfortunately, however, the attention has not come from Congress, but rather from law enforcement. The attention is also directed at physicians, not just the patients, or "players." It is more than just a threat—the DEA is bypassing medical societies and bringing physicians directly into the criminal justice system.

There is a growing list of what we need to do. MLB now mandates one unannounced UDT of each player during the baseball season, with further testing of select players. Physicians managing patients with chronic opioid therapy should do the same. This and other monitoring should be part of our own collective bargaining agreement and promulgated in our individual physician-patient opioid agreements. This will enable us to test all of our patients on chronic opioid therapy without feeling uneasy and without making them feel stigmatized—it will be just another part of the deal. Of course, UDT is not a panacea and lacks perfect sensitivity and specificity. It is imperative that we understand their capabilities and their limitations. We suggest that all physicians prescribing chronic opioid therapy should have a working knowledge of UDT, particularly the specific tests used by their labs.

An important caveat is that neither screening tests (usually immunoassays) nor confirmatory tests (e.g., gas chromatography-mass spectrometry) are immune to false positives or false negatives, both of which could result in patients being (wrongly) labeled as drug abusers or diverters and deprived of appropriate therapies. In addition to demonstrating the presence (or absence) of prescribed opioids, UDT is also valuable for what else it can detect in urine—illicit drugs and nonprescribed or unauthorized licit drugs that raise red flags for substance use disorders. The importance of this sensitivity lies in the improbability of successfully treating pain while concurrent substance use disorders remain unaddressed.

We are not suggesting that UDT be the only monitoring tool used. There is no substitute for spending time with patients, regularly reassessing their pain and the effects of pain—and its treatment—on their lives. We also need to use other tools in conjunction with UDT, such as the following:

- Intervisit pill counts. Having patients come to the office (on, for example, 24 hours notice) with their opioid medication can be helpful in detecting abuse and diversion and can help make sense of (false) negative drug screens.

- Selective witnessed administration of opioids, with continual observation through the period of peak opioid effect (and with naloxone on hand!), particularly for those on higher-dose opioid therapy, may result in somnolence or respiratory depression in those who are diverting their opioids.

- Interviews with significant others (with patient permission).

Some might object that this is an unfair burden on our already time-strapped schedules, or that we are physicians, not police officers (and are treating patients, not criminals). We would counter by suggesting that the responsible management of pain with chronic opioid therapy is not as simple as writing a prescription and hoping for the best. Indeed, writing the prescription is merely the simplest part of a process that begins with meticulous assessment, and continues with ongoing reassessment for level of pain relief, functional level, adverse drug effects, and aberrant behaviors, and may occasionally progress to referral to specialists in addiction medicine/psychiatry. We also cannot ignore the fact that

opioids are the prescription drugs with the greatest potential for abuse and diversion,[6] and that we sometimes play an unwitting role in enabling these behaviors. This places us at risk for censure (or worse), and places our present and future patients at risk for being deprived of appropriate treatment for legitimate pain issues. UDT, as one component of a comprehensive treatment and monitoring program, is a reliable and time- and cost-effective method for detecting drug abuse. If it is deemed essential for the integrity of professional sports, we believe it should likewise be viewed as essential to the integrity and continued viability of our endeavor.

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