Injury, Int. J. Care Injured 50 (2019) 221–222

Contents lists available at ScienceDirect

Injury

journal homepage: www.elsevier.com/locate/injury

Editorial

Managing pain following injury–Time to change

The current opioid epidemic is tragically affecting many countries including my own. In Australia, the annual death rate from opioid overdose now exceeds the road toll, as is the case in the USA [1]. In the past, as trauma clinicians, we have comforted ourselves by saying that the problem has little to do with us, it is a social problem, and we are there to "pick up the pieces", when the consequences of addiction result in hospitalisation. Recent evidence suggests that this is not entirely true and that we may be partly to blame for the problem, fuelling the epidemic with our current clinical approaches to managing patients with pain.

A powerful and provocative article published in the New England Journal of Medicine in 2017 [2], showed an association between high opioid prescribing rates by providers and subsequent narcotic addiction in patients. Although there are potential confounders, the data are compelling and worrisome. The implication being that the more liberal we are with opioid prescriptions in the acute health setting, the more likely that we will facilitate patients to become addicts. In the past, we have differentiated prescription opioids from illicit opioids and not understood the complex relationship between initial prescription drug abuse and subsequent illicit drug use. The severe restrictions on prescription opioids in the USA have shown that once patients are addicted, they can easily transition to illicit drugs, when legal supplies are unavailable [3]. So merely cutting off legal supply does not immediately fix the problem.

As clinicians we have been taught for the last couple of decades, that we must "stop" pain. All pain is bad, and we must do all in our power to remove pain. Nurses and paramedics have been subject to intensive training programs on how to measure pain, usually via some variation of the numerical rating scale. Nurses and paramedics believe that they are acting as patient advocates (patient centred care) by initiating analgesia early in the clinical pathway. Strong analgesics are given immediately on arrival if pain scores are high, using a nurse initiated analgesia protocol. Pain measurement has been promoted as the "fifth sign" [4]. This has elevated the measurement to a "vital" sign, in the same tier as blood pressure, pulse rate, respiratory rate and body temperature – a predictor of life and death. In addition to the language that has been used to promote the importance of pain scores, the monitoring and reduction of pain scores has been identified as a Key Performance Indicator (KPI). This means that clinical units undergo assessments for the quality of care, based on numerical pain score measurement and reduction. Nurses and doctors are accountable for an arbitrary measurement never intended for this purpose. The patient may be happy to have "some" pain associated with an injury, rather than taking medication with serious side effects, however the clinicians are forced to coerce patients to receive analgesia to meet a KPI.

The role of pharmaceutical companies in changing medical culture and prescribing habits should not be underestimated. OxyContin® was promoted as a safer narcotic, with less addictive potential by pharmaceutical companies. Pain specialists engaged with primary care physicians, often at pharmaceutical company sponsored events, to impress on clinicians that the longer half-life of OxyContin® reduced the likelihood of dependency. This was despite the pharmaceutical company having evidence to the contrary. From 1996 to 2012, global OxyContin® sales increased from US$48 m to over US$2.4bn [5]. It is of note that company executives have subsequently been fined for misrepresentation of experimental data.

Although OxyContin® has been identified as a touchstone for the misuse of prescription opioids, the problem with our current approach to pain is much broader than the type of opioid we use. It is becoming apparent that other non-opioid drugs, such as pregabalin and gabapentin, sold as alternatives to "dangerous" opioids, also have addiction potential [6]. It is likely that most of the drugs we use could result in dependency or have other serious side effects. Thus, the current clinical pathways for post-injury management, which emphasise the reduction of pain scores using drug therapy should be reconsidered.

There is a strong association between the universal penetration of pain score measurement in the acute setting, KPIs for pain score reduction and facilitated access to oral narcotics by prescription. It is not that assessing pain is bad. As clinicians we certainly have a duty to reduce severe pain and suffering. To do this, we need to ask the patient if they are in pain. We need to consider whether a pain score adds value to our clinical assessment and whether KPIs should be associated with this clinical assessment. It may be better if we just ask the patient whether they want a strong analgesic. We also need to consider informed consent for such prescriptions. We should ask the patient whether they want to run the risk of addiction and other side effects. My personal experience is that many patients are comfortable with moderate pain and would prefer not to take strong analgesics with side effects.

A further consideration is the length of exposure to powerful analgesics. A single dose of a drug during initial assessment may be necessary, but once the injury is splinted or fixed, is there a need for ongoing high doses of analgesia? It is common for analgesics to be initiated in hospital and continued for weeks following discharge to rehabilitation and primary care. Although the

https://doi.org/10.1016/j.injury.2019.02.005

majority of narcotics are prescribed by primary physicians in the community, the initiation of therapy often occurs in-hospital. Thus, statistics showing the small contribution directly attributable to EDs and acute facilities are probably misleading [7].

Many hospitals are now considering multi-modal interventions to reduce the reflex reaction by busy frontline staff to order potent analgesics following first assessment. Hospitals are also looking at methods to reduce continuation of opioids after discharge. These interventions include prescriber education and accountability, enhanced oversight via measurement of individual prescribers, tools to limit postoperative discharge prescriptions, avoidance of default amounts on standard opioid prescription orders, and improved patient and public education about opioid risks and alternatives. There has been a significant effect on reduction of prescriptions for narcotics [8].

The fact that we as trauma clinicians, may be partly responsible for an epidemic that is killing more people than motor vehicles is a powerful motivator for change in our thinking about pain assessment and management following injury.

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