



AEROSOLIZED OPIOIDS: PRACTICAL DETAILS

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In the last issue we discussed the use of aerosolized opioids and indicated that we would follow up in the subsequent column with some practical details. As we noted in the Jan/Feb 2008 column, aerosolized opioids are becoming increasingly popular for the palliative care and treatment of patients with severe intractable pain due to terminal lung cancer and the breathlessness that accompanies end-stage COPD. Treatments are often conducted in the setting of the hospice and in hospitals with active and advanced pain management programs. However, aerosolized opioids may be ordered in practically any hospital setting and also the home. Admittedly, aerosolized opioids are a bit out of the ordinary and only a few RT departments have anticipated their use and preemptively established a policy and procedure or a protocol to guide staff. A number of departments are

already performing aerosolized opioid administration, having first had to scramble to provide the procedure rather unexpectedly. The first encounter usually comes out of the blue, late on a Friday afternoon, during a period of staff shortages. The order reads something like: "morphine by nebulizer, 10 mg, Q4H;" and the doc has left the building. Without an existing P&P, this simple order can unleash a wellstorm of questions and confusion.

Never lose sight of the fact that your hospital operates under very strict statutory requirements with respect to narcotics

Accordingly, I would like to offer some suggestions and resources for proactively preparing for the eventuality of having to administer aerosolized opioids. First, department management and continuing education personnel need to make a determination whether aerosolized opioids are likely to become a future reality in their particular facility. If the answer is yes, then now is the time to start planning. Some of the next steps may prepare you for making this determination. If it has already happened, then you are going to really have to hustle. Now is the time to obtain the relevant literature and dive into it in sufficient depth to understand its ramifications, limitations and what, by extension, it may portend for your department if you determine that you may eventually receive orders of this nature. It may be helpful to have one or two specific individuals become responsible for searching the literature and becoming expert enough to discuss it comprehensively and provide departmental inservice based upon it. The goal is to become intellectually prepared to discuss the use of aerosolized opioids, and the development of a protocol, with the

applicable physicians, nurses and pharmacists. I suggest this particular step at the onset because none of the subsequent steps will be possible if you are not able to discuss this topic credibly. And yes, it may at first raise some suspicion as to your motives, but if you are well-informed and credible, you can quickly bypass any suspicion and appear to be genuinely interested in proactively preparing for a procedure that is gaining ground and may justifiably fall, in part, within the realm of respiratory therapy practice. A list of inhaled opioid references may be found at <http://www.healthlinemed.com/ref-morphine.htm>. Sample copies of P&Ps and protocols may be available from peers in the online respiratory communities of the RC_WORLD listserv and the AARC HelpLine.

At this point you should recall the term "narcotic," and hereinafter pay strict attention to the context in which this word is used. Within the narrow context of law enforcement and state legislation, morphine and other opioids are considered narcotics and regulated as such. And, while it is accurate to refer to them as such, in some cases, particularly when talking with patients and their families, the word "narcotic" may have a negative societal connotation. Therefore, in this context, it may be more useful to use the terminology "pain medication," or "inhaled pain medication," or "medication to relieve shortness-of-breath." But you should never lose sight of the fact that your hospital operates under very strict statutory requirements with respect to narcotics and will probably place the highest priority on that aspect. Next, you should probably address the two key questions that invariably arise at the onset of a program such as this: (1) Can RTs administer narcotics or controlled substances, and (2) can morphine or other opioids be given by nebulizer when nebulization is not an "approved route"? With respect to the first question, the general answer is probably. But it depends. This will require you to seek clarification and you should not necessarily accept the

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first negative answer you receive as it may well be a "kneejerk" reaction and not one based upon the prevailing statutes and their interpretation. Many people you encounter may initially assume that RTs cannot administer narcotics simply because they are not physicians or nurses, but that may not actually be true. However, states differ in terms of what statutes may address this issue. You only need be concerned about your state; so don't allow hearsay from other states to muddle the issue. As a broad generality, state health laws and/or drug and narcotics laws may regulate who may store, transport, dispense and prescribe narcotics. It would be appropriate at this stage to closely review all applicable statutes including your state respiratory therapy practice act, or licensure legislation, or whatever it is called, and see what it says about the administration of medications. Many state RT practice acts provide that licensed respiratory personnel may administer "respiratory" medications although the wording is typically more convoluted and may require interpretation. It has been regarded in many hospitals where RTs administer aerosolized opioids that, when such medications are used for pulmonary pain relief or treatment and relief of other respiratory symptoms or conditions, such use falls within the scope of the RT practice act and is therefore permitted. In other words, it may be acceptable for an RT to administer a morphine nebulization treatment to a patient with severe pain from bronchogenic cancer. But it is probably not acceptable, for example, for an RT to give a subcutaneous Demerol injection to a post-op patient with a painful incision site. This interpretation has led to a variety of permutations of aerosolized opioid protocols in numerous hospitals wherein a nurse may be required to draw up the prescribed dose and hand it over to a respiratory therapist who places it in the nebulizer then administers the treatment to the patient and performs any associated patient monitoring, pain assessment and charting.

With respect to the second question, a physician-initiated prescription or protocol is a must! Judicious "off label" use of drugs and devices, as prescribed by a physician, is generally allowed, particularly when supported by the literature and prevailing practice (which is true for aerosolized opioids). The development of a standardized protocol could indeed be a multidisciplinary endeavor, led by the Respiratory Therapy Department, to establish guidelines for patient selection, identification of acceptable opioid products (preservative-free, correct concentration for proper nebulizer fill volumes), dosing and dose escalation (see previous issue), selection and standardization of a nebulizer and patient interface, use of exhalation filtration, required components of the physician's order plus the logistical interactions between Nursing and Respiratory Therapy. Some of the other groundwork for a successful implementation may include consulting with some of the medical personnel who might be most likely to prescribe aerosolized opioids. Look for a pain management service associated with Anesthesiology, Oncology or some other service. Include your medical director; he/she may be able to pave the way. And if you have not done so already, this would be a good time to consider providing inservice education for all the RT staff concerning pain, pain management and especially the hospital's specific pain recognition and scoring system. It may be politically wise to involve a nurse or physician from a pain management program if it exists. And do not overlook involving the Pharmacy because it may be necessary for it to procure a specific type of morphine or other opi-

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oid that is preservative-free and in the correct concentration for proper nebulizer loading. Because the patients who typically require aerosolized opioids are weak and debilitated, it is necessary to limit the nebulizer fill volume to no more than 3 or 4 mL to keep treatment time to a minimum to avoid patient fatigue.

It should go without saying that the administration of aerosolized opioids is an undertaking that requires a solid procedural basis that is taken seriously and strictly adhered to by the RT staff. It also represents an opportunity for the RT department to branch out and extend both its usefulness and its unique skills to enhance an increasingly important aspect of patient care, namely the relief of pain. And, as a final note, I would like to stress the need for a filtered delivery system, and a sufficiently ventilated delivery venue, particularly in care environments where healthcare workers are typically present. It seems prudent to protect healthcare workers from inhaling fugitive opioid aerosols.

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