

Focusing on TLC in Palliative Care

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Presented at Wednesday at Noon-Ask the Consultant

O ver the storm-tossed ocean of terminal illness, the beacon of palliative care shines brightly from the tripartite base of symptom control, communication, and family support. The light from all three needs to be focused on any given problem, as the patient and family move toward the end-of-life stage and beyond.

1. Symptom control is a concept of relieving the patient's distress, rather than offering the comfort that comes with cure.

2. Between the parties involved (oncologist, family physician, nurse, social worker, clergy, family, and the patient at the centre), open communication offers consistent messages to smooth—but rarely completely settle—troubled waters.

David's twitching

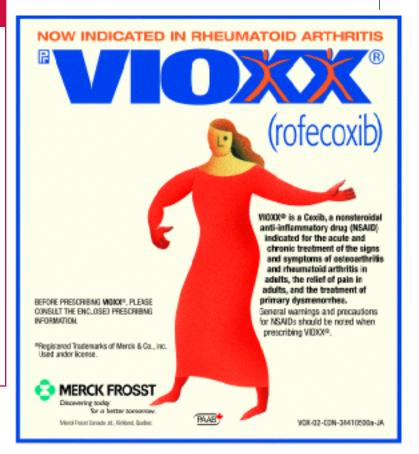
David, 58, had lung cancer for one year when he presented with dyspnea and weakness.

He was a heavy drinker up until six months ago. He has liver, bone, and brain metastases.

On examination, David was suffering from twitching and was confused. At the time, he was on MS Contin 100 mg twice daily and four doses of MSIR 20 mg over the last 24 hours.

David's wife is overwhelmed with his care and recent confusion and twitching.

His opioid was rotated from morphine to hydromorphone 10 mg every four hours with a breakthrough of 5 mg hydromorphone every one hour as needed. He was given lorazepan 1 mg every two hours as needed. Over the next 24 hours, he required three doses of lorazepan and no breakthrough doses of hydromorphone. Within 48 hours his confusion had settled and his twitching had decreased.



3. Wrapping up the palliative trio is family support. All families need support embroidered with kindness and understanding and, all too often, direction and instruction. The patient with family in tow, not the illness, becomes the locus of care.

Twitching, jerking and seizuring

With all the tissue breakdown and chemical imbalances that accompany the dying process, I'm surprised patients don't demon-

strate more symptoms. Multifocal myoclonus is a painless, yet distressing, symptom that causes the patient to twitch and jerk about. The causes include:

- opioid toxicity,
- brain metastases,
- hypercalcemia (don't forget to check the albumin),
- metoclopramide consumption,
- delirium, and
- the unknown.

If the patient is near death or has refused further investigations, the workup is at the bedside and involves a review of medications, a careful physical examination, and a discussion with the patient and/or family.

Opioid rotation is the current phrase used to describe the discontinuation of one strong opioid and the start of another. Morphine, for example, is metabolized in the liver, and the breakdown products are excreted via the kidneys. In renal failure, these breakdown products accumulate and block the opioid receptor sites. In such a situation, the patient's morphine requirements rapidly increase without a consequent increase in comfort.

Commonly, a patient's morphine needs will increase as the illness progressed and the pain increases, but in such cases the morphine continues to relieve the pain. In morphine toxicity situations, the drug stops working. Stopping the morphine and switching to immediate-release hydromorphone will allow the morphine breakdown products to be excreted. If toxicity is the cause, the twitching will settle within 48 hours.

> Stopping or reducing metoclopramide may help relieve myoclonus, while investigating for hypercalcemia depends on the performance status of the patient. If the patient is in the last few days of life he/she might not be physically able to withstand the intravenous (IV) fluids and IV bisphosphonate needed to correct this imbalance. Hypercalcemia occurs more

commonly in frail patients with multiple bony metastases, and with cancer of the lung. Low-dose clonazepam (0.5 mg to 1 mg twice daily) helps.

Seizures, often a sign of brain metastases, are treated acutely in the usual way with IV diazepam and dilantin before the patient is switched to oral medications. As the illness progresses and the patient becomes less able to swallow, parenteral medications are needed. I have had good results with phenobarbital, at doses of 30 mg three times a day, or 90 mg at bedtime given through a subcutaneous port.

Moving a near-dying patient down to radiology may cause more suffering than overall benefit.

Table 1 Relaxants for delirium

- Lorazepam 1-2 mg every four hours
- Haldol® 1-5 mg every four hours
- Methotrimeprazine 12.5-50 mg every four hours
- Phenobarbital 30-120 mg every four hours
- Midazolam 1-10 mg every hour as needed (if all else fails)
- Sometimes, all above drugs are needed at once

What about treating near-death?

Moving a near-dying patient down to radiology may cause more suffering than overall benefit. Similarly, blood tests are often difficult because of friable veins. As well, the family sits around and worries about the test results. They remain worried until your next family meeting. No tests usually means the patient and family are calmer and anxiety-free.

Also what are you going to do with the results? Will the always-abnormal investigations help, or just leave you and the family with unanswerable questions? What then? More tests? Perhaps a consultation with a colleague, who might or might not know the family dynamic as well as you? Our aim here is to relieve distress, not cause more.

How do I treat delirium?

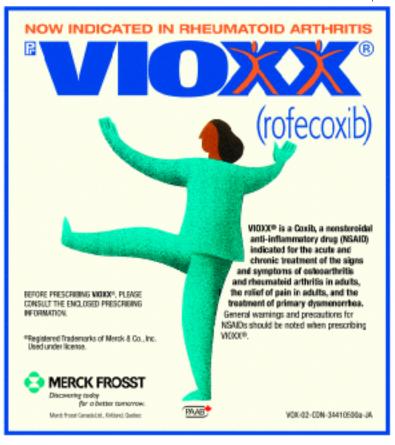
The workup for delirium is well-documented, but in the end-of-life circumstance the physician needs to consider the performance status and stated wishes of the patient. Bedside evaluation is quite appropriate if the patient is within days of death. Consider this: the therapies to investigate and 'cure' delirium can be extensive and uncomfortable.

Table 2

Methods of aiding a patient to breath

- Ask the patient's anxiety-laden visitors to step out
 of the all-too-crowded room
- Turn on a fan, open a window, and offer the patient a cool drink
- Prescribe Ativan® 0.5-1 mg every four hours as required
- Prescribe nebulized saline, which has reportedly been useful (nebulized morphine is no better than plain saline).

The correction of the multiple causes of delirium needs to be tempered by the preferences and physical reserve of the patient. A complete investigation and aggressive therapy are indicated early on in the illness. Relief of symptoms is paramount in the last days. The family needs to be informed as



to what is going on. I find that carefully explaining my perception of what's happening will help most families accept the confusion and the need for the patient's sedation.

Terminal delirium occurs as the patient starts to die, and can last up to a week. The patient may show symptoms all the way from a little bit of restlessness to full-blown psycho-motor agitation with aggression and screaming. Up to 30% of dying patients require sedation (Table 1).

Although terminal delirium occurs in 40% of patients, the severe form occurs perhaps 1% of the time.

Malignant bowel obstruction

Bowel obstruction is traditionally treated by relieving the increased intra-luminal pressure with a nasogastric tube and suction. The plan is to relax the bowel, allowing the obstruction to release. When the obstruction is caused by cancer, and when the surgeon reports further surgery will not be contemplated, the patient is still suffering and needs relief. A low obstruction will permit some patients to ingest food but regurgitate every so often (possibly twice a day), while those with a high blockage will vomit after every ingestion.

Pain relief is given subcutaneously through a butterfly needle with a rubber injection tip. Maxeran[®] (metoclopramide) should be avoided, as its prokinetic action may worsen the vomiting. The insertion of a gastrotomy or nasogastric tube may help patients with a high obstruction, but rarely help those with a lower bowel blockage. Surgery may relieve the obstruction, but post-operative complications are frequent and severe, and leave everybody involved wishing they had tried medical management instead. Parenteral fluids may be given through a lower abdominal site subcuta-

neous, butterfly set up at a rate of 500 cc to 750 cc twice daily.

How do I treat shortness of breath?

The physician should consider the relief of reversible airways disease and drainage of excess pleural fluids in assisting a patient who is short of breath. If, as is often the case, neither is possible (because the disease is not reversible or the patient is too sick or too fed up to have a pleurocentesis), the physician can try to relieve the symptom.

Small doses of morphine (half the four-hour dose or 5 mg to 10 mg orally every hour as needed) usually help the patient rest, and decrease air hunger. Very frail, elderly persons might need less (2.5 mg morphine), but generally the doses are in the 5 mg to 10 mg range. The drug dilates peripheral vessels, diverting fluid from the chest, and decreases air hunger without changing the oxygen saturation or level of alertness. There are other ways to aid breathing as well (Table 2).

When assessing a patient who is acutely short of breath, I find it helpful to sit (not stand) quietly at the bedside and take the patient's pulse and respiration rates for a full minute. Demonstrating calmness provides an opportunity for the patient and family to calm down.

Rushing about ordering X-rays, oxygen saturants and tubes makes the patient more distressed and sends the family into a tizzy. The next thing you know, the whole extended family is at the door demanding explanations.

What do I do about dehydration?

The use of IV fluids in patients with advanced cancer is not indicated.

Take-home message

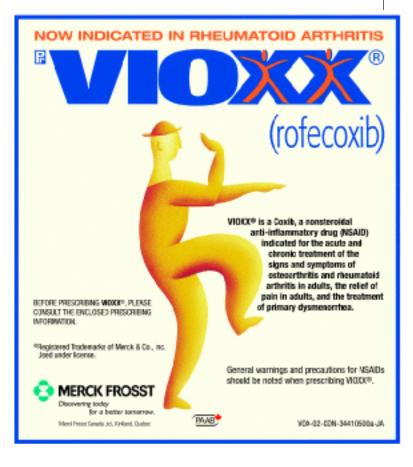
- Symptom control relieves the patient's distress rather than offering the comfort that comes with cure.
- Multifocal myoclonus is a painless, yet distressing, symptom that causes the patient to twitch and jerk.
- Hypercalcemia occurs more commonly in frail patients with multiple bony metastases and with cancer of the lung.
- Moving a near-dying patient down to radiology may cause more suffering than overall benefit.
- The correction of the multiple causes of delirium needs to be tempered by the preferences and physical reserve of the patient.
- The physician should consider the relief of reversible airways disease and drainage of excess pleural fluids in assisting a patient who is short of breath.

By the time these patients get to their last weeks of life, most have lost considerable weight. The albumin is often below 20, and the muscle mass has decreased considerably. Cancer somehow changes the sensation of taste, and previously loved foods become unpalatable or even nauseating. Smells of cooking food can induce nausea. Appetite is greatly diminished in this population, as is food intake. As the disease progresses, fluid intake drops off to nothing. Still, such patients rarely (if ever) complain about hunger. Remember to moisten the mouth, to relieve the sensation of dry mouth.

The low colloid osmotic pressure prevents the retention of the fluid in the vasculature, so "rehydration" fluid becomes:

- ankle edema, thereby decreasing ambulation,
- pulmonary edema and pleural fluid, causing increased shortness of breath, and
- ascites leading to increased nausea and vomiting.

Setting up and keeping an IV line in situ is difficult because of the friable veins. Also, the IV pump, with its 50-times-a-day alarming mechanism, puts a physical barrier between a dying patient and the family. Although patients rarely demand an IV in this situation, and most are delighted when I say "no more IVs," many family members still labour under the false impression that IV fluid is somehow food.I hold a discussion about food and fluid intake in every patient and family situation. The discussion is daily with some families. Complicating this confusion is the ubiquitous use of the IV. Patients are always more comfortable without an IV, so such discussions end up



being held with the family. Tact, understanding, kindness, and compassion are needed in great quantities here. Giving in to wacky demands, or offering up medical rudeness doesn't make anybody more comfortable. As comfort is what palliation is all about; the use of IV fluids in patients with advanced cancer is not indicated. CME

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Net Readings

- 1. Edmonton Regional Palliative Care Program: www.palliative.org
- 2. Palliative Care Education: www.pccchealth.org/pced

A Beacon of Hope

www.alzheimer.ca Help for Today. Hope for Tomorrow.

It's been called an "insidious fog"... and "sailing into the dark"... Alzheimer Disease affects the brain, erases memory and eventually takes life itself. The Alzheimer Society provides a beacon of hope to people with the disease and their families. The Society provides information, support and funds research into the cause and cure of the disease. We're fighting back.

Alzheimer Society