Hydromorphone induced neurotoxicity in palliative care

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Opioids are commonly used for pain control in palliative care settings. Accumulation of active metabolites of opioids can cause a well-recognized toxidrome including sedation, hallucinations, myoclonus, seizures and cognitive dysfunction. Sedation, which is the most commonly seen symptom of toxicity, leads to delirium and obtundation. Opioid toxicity is often associated with the amount ingested and its speed of absorption in the body. This can have life-threatening effects on various body systems. Gaining expertise with the use of hydromorphone for chronic pain management should be the primary goal of those managing pain in the terminally ill patient. There is a wide choice of routes of administration and the adverse effects may be minimized by careful dose adjustment, particularly in patients with renal failure or in the elderly. When alternatives are indicated for more severe pain, methadone or fentanyl may be considered. When a patient is not responding to opioids, review the pain diagnosis with the causes of opioid-insensitive pain in mind, particularly bone and neuropathic pain. Rotation of the one opioid to another should be considered. Co-analgesics or one of the recently developed NMDA receptor antagonists may also be required. We will discuss a case study involving Anne-Marie, a 65 years old female with refractory myeloma, on a regular dialysis program and chronic back pain. She was due to commence radiotherapy to the femoral lesion and was admitted to RPA with escalating pain and severe drowsiness. She complained of pain everywhere, but it was worst in the left femoral and left L2/3 spinal regions with decreased mobility and sudden cramping. Her analgesic medication: Fentanyl patch 175 mcg/hr every 3 days, Fentanyl lozenges 200 mcg Q4h PRN if inadequate relief, Hydromorphone S/C 5 mg Q4h and PRN with rapid escalation by renal team and Gabapentin 200 mg pre-dialysis and 400 mg post-dialysis. Finally, a discussion about opioid induced neurotoxicity and management will be presented.

Biography
Olfat Zekry has obtained her Bachelor of Pharmacy and Post Graduate Diploma in Hospital Pharmacy from the University of Tasmania. She has completed her Master of Science Medicine Pain Management from Sydney University. She is currently Unit Coordinator for the pharmacology components of the master’s course with the Pain Management Research Centre in the Department of Medicine, Sydney Medical School at the Royal North Shore Hospital. She has had a strong interest in education and teaching for many years. She has had international publications including subanesthetic, subcutaneous ketamine infusion therapy in the treatment of chronic nonmalignant pain, and conversion of Gabapentin to Pregabalin. She also works as a Consultant Clinical Pharmacist in the Pharmacy Department at the Royal Prince Alfred Hospital at Camperdown, Sydney.

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