ProCare HospiceCare

Excellence in Hospice Pharmacy and Clinical Services . . . One Patient at a Time!

ProCare HospiceCare Case Study

MC, a 75-year-old female, was admitted to ABC Hospice on 12/3/16 her admitting diagnosis was metastatic breast cancer with co-morbidities of COPD, type 2 diabetes, CHF, and chronic renal failure. On admission, her chief complaints were pain described as 9 on a scale of 1 to 10, 4+ edema, extreme nausea, agitation, and SOB. She was also found to have hypoglycemia, hyperkalemia, and high serum digoxin levels. Her HR and BP were within normal limits. Her PPS was 40%, and she had poor oral intake.

Her admission medications included:

- Transdermal fentanyl 400 micrograms/hr every 48 hours
- Sustained release morphine 90mg PO daily (divided)
- Immediate release morphine 5mg PO every 4 hours as needed for breakthrough pain
- Rosiglitazone 4mg PO BID
- Metformin 850mg PO TID
- Potassium chloride 20 mEq PO 4 times daily
- Albuterol MDI 2 puffs INH 4 times daily
- Ipratropium bromide nebulization solution INH every 4 hours PRN SOB/wheezing
- Digoxin 0.25mg PO once daily
- Furosemide 40mg PO BID
- Glyburide 5mg PO once daily

On admission, the hospice physician and the hospice admitting nurse consulted with the ProCare HospiceCare Clinical Pharmacy Specialist. Together, they identified eight medication-related issues, including a significant drug interaction. Changes were made in her medication regimen, allowing MC to achieve significant improvement in her symptoms and pain within twenty-four hours following her admission to hospice.

Changes made as follows:

- Five-day cross-taper off fentanyl and sustained release morphine onto methadone
- Switch from morphine IR to oxycodone IR to reduce risk of morphine metabolite toxicity with renal impairment
- Discontinue rosiglitazone, metformin, glyburide, digoxin
- Reduce potassium
- Switch albuterol inhaler to albuterol via nebulizer QID routinely
- Switch furosemide to bumetanide for improved, more even diuresis

In her subsequent days, ProCare HospiceCare performed a "Daily Methadone Check" service for 7 days to ensure the medication was being dosed safely and effectively. MC's pain and SOB remained very well managed, and her edema was controlled at 1+. Her nausea, which was thought to be due to digoxin toxicity, resolved. Her medication-induced agitation was gone, and she was no longer hypoglycemic or hyperkalemic.

Identification of medication-related problems is of paramount importance for all patients. However, for hospice patients in particular, a rapid medication work-up may mean the difference between poor symptom management and an acceptable quality of life. ProCare HospiceCare ODCS puts hospice pharmacists "in the trenches" with physicians, nurses, and their hospice patients 24/7/365. Isn't this the clinical and professional support your hospice needs? Let ProCare HospiceCare provide you with answers in an instant…when every minute counts.