Update on Psychopharmacological Medications

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Psychopharmacological medications are drugs used to stabilize or improve mood, mental status, or behavior. These medications are used to treat, manage, or control symptoms associated with disorders such as insomnia, psychosis, depression, anxiety, bipolar disorder, schizophrenia, obsessive compulsive disorder, and panic disorder.

N.C. Adult Care Home Regulations

- Correct medication orders for PRN psychotropic
- Refer to Rules 10A NCAC 13 F/G .1002(g)(h): There are 2 parts to this Rule. The first part addresses "prn" or as needed orders for psychotropic medications. The second part of the Rule addresses training requirements.
  - (1) detailed behavior-specific written instructions, including symptoms that might require use of the medication; (2) exact dosage; (3) exact time frames between dosages; and (4) the maximum dosage to be administered in a twenty-four hour period.
Update on Psychopharmacological Medications

- Dementia
  - A Latin word that means “without mind”
  - Clinical Description
    - Reversible (20%)
      - drug toxicity
      - metabolic
    - Irreversible (80%)
      - Alzheimer’s
      - PD, Downs, Stroke, etc...

Dementia (cont.)

- The Numbers
  - 1/10 at 65 yoa
  - 5/10 at 85 yoa
- Cost
  - 100 Billion
- Extensive Research
  - top 5 in new drugs

Dementia (cont.)

- Usually patients will have behavioral disturbances
- Residents will also typically present with cognitive impairments
Delirium

- An acute confusional state that includes symptoms very similar to those of dementia and psychiatric disorders. The diagnostic criteria for delirium include a fluctuating course throughout the day, inattention as evidenced by being easily distracted, cognitive changes, and perceptual disturbances.
- Often characterized as hyperactive (e.g., extreme restlessness, climbing out of bed), but more commonly delirium is hypoactive often leading to the misdiagnosis of dementia or a psychiatric disorder.
- Delirium is particularly common post-hospitalization and with infections.
- Delirium increases the risk of developing dementia and individuals with dementia are at greater risk of developing delirium.
- Failure to recognize and act quickly may result in poor health outcomes, hospitalization or death.

Update on Psycho-pharmacological Medications

If Behaviors Emerge, the team should:
- Define the behavior and frequency
- Determine if the behavior is harmful to the resident or interferes with function or delivery of care
- Determine causes of behavior
- Review and discuss interventions used in the past

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- Non-Drug Interventions for the Dementia Resident:
- Some things you cannot treat with drugs:
  - Singing
  - Cursing
  - Wandering
  - Some yelling
  - Talking loud
  - Babbling
  - Agitated
- All of the above are potential problem uses of medications.
Update on Psychopharmacological Medications

- Alternatives therapies for the Dementia resident
- Pain: with dementia med should be routine
  - osteoporosis
  - hip fracture
- Insomnia
  - treat pain
  - decaffeinated diet
  - decrease meds that cause insomnia
  - decrease facility noise
- Yelling
  - treat pain

There are 5 classes of psychotropic medications:

- Antipsychotic drugs (neuroleptics)-Used to treat acute and chronic schizophrenia, psychoses (caused by biochemical changes in the brain), the manic phase of bipolar disorder and psychotic disorders.
- Anti-anxiety drugs-Used to decrease anxiety, stress or agitation
- Antidepressants-Used to treat depression and/or pain in some residents
- Anti-manic drugs-Used to treat bipolar disorders
- Insomnia drugs - Used to induce sleep or maintain sleep for those residents with insomnia

Medication Administration

- Many of the medications listed are used to treat psychiatric illnesses and therefore these medications must be administered according to physician orders. If the client refuses these medications the facility should have a procedure to notify the prescriber, of the refusal.
- Medications that are ordered around meal time or with food should be done according to physician order to reduce the risk of stomach upset and possibly decreasing compliance.
Update on Psychopharmacological Medications

- Review of medications that can be considered chemical restraints:
  - Antipsychotics:
    - Typical: haloperidol (Haldol), thioridazine (Mellaril), fluphenazine, etc.
    - Atypical: risperidone (Risperdal), olanzapine (Zyprexa), quetiapine (Seroquel), aripiprazole (Abilify), ziprasidone (Geodon), clozapine (Clozaril), paliperidone (Invega), Loperidone (Fanapat), aripiprazole (Saphris) and Lurasidone (Latuda).
  - Anti-anxiety meds:
    - lorazepam (Ativan), alprazolam (Xanax) diazepam (Valium), oxazepam (Anxan), etc.
  - Sedative/hypnotics:
    - Temazepam (Restoril), zolpidem (Ambien), etc.

Antipsychotic Medications (cont.):
- Typical Agents:
  - haloperidol (Haldol), Thoridazine (Mellaril), Chlorpromazine (Thorazine), loxapine (Loxitane), thiothixene (Navane), trifluoperazine (Stelazine) etc.
- Side effects (typical agents):
  - Anticholinergic:
    - peripheral: dry mouth, blurred vision, constipation, urinary retention
    - central: confusion, cognitive impairment, delirium, hallucinations
  - Extrapyramidal Symptoms (EPS)
    - acute dystonic reaction
    - akathisia: inability to sit still
    - pseudoparkinson: drugs cause classic symptoms

Selected Additional Antipsychotic Warnings
- Common to ALL antipsychotics:
  - Neuroleptic malignant syndrome (can be fatal)
  - Tardive dyskinesia (highest among elderly, especially women)
    - involuntary movement disorder for the tongue, lips and jaw
    - prevalence higher in the elderly and has no treatment
- Common to ALL atypical antipsychotics:
  - Increased blood sugar (can be fatal)
  - Orthostatic hypotension (can lead to falls)
  - Seizures (Alzheimer’s disease can lower seizure threshold)
  - Dysphagia (can lead to aspiration pneumonia)
  - Potential for cognitive and motor impairment
- Common to aripiprazole, olanzapine and risperidone:
  - Cerebrovascular adverse events, including stroke (can be fatal)
Other Important Antipsychotic Adverse Effects

- Sedation (can lead immobility and pressure ulcers, or limited mobility with dizziness, balance issues, and falls)
- Clinical worsening, suicidality, and unusual changes in behavior, especially in first few months of therapy and with dosage changes (increases or decreases)
- Increased Cholesterol
- Dizziness
- Fatigue
- Increases in liver enzymes

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- Antipsychotic Medications (cont.):
  - Atypical Agents:
    - Side effects are similar, but less frequent TD
  - Med specifics:
    - Risperidone (Risperdal): EPS can occur with doses greater than 2mg/day. Dose is 0.25mg-2mg/day
    - Aripiprazole (Abilify): Start at low dose 2.5-5.0mg
    - Ziprasidone (Geodon): not sure of geriatric dose, warning regarding cardiac problems

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- Antipsychotic Medications (cont.):
  - Atypical Agents:
    - Side effects are similar, but less frequent TD
  - Med specifics:
    - Olanzapine (Zyprexa): anticholinergic, may worsen dementia, weight gain. Dose 2.5-10mg/day.
    - Quetiapine (Seroquel): Nefective dose, cataract potential. Dose 12.5mg-200mg/day.
    - Clozapine (Clozaril): may cause life threatening agranulocytosis - blood work.
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- **Antianxiety medications**
  - Benzodiazepines: lorazepam (Ativan), alprazolam (Xanax), diazepam (Valium), oxazepam (Serax), etc.
  - "good drug/bad drug": the good drugs are those which are not metabolized: lorazepam (Ativan) and oxazepam (Serax). Bad drugs are diazepam, chlorapectate, flurazepam, etc. These medications have half-lives up to 100 hours!!
  - Pearl: even though there are some "good" benzodiazepines; all of these medications can cause or increase the risk of falls, cause cognitive impairment and decrease inhibition. All of these problems, make them a poor choice for the elderly, but they are still used frequently.

- **Sedative/Hypnotics**
  - most of the drugs used are Benzodiazepines: temazepam (Restoril), Flurazepam (Dalmane) etc..
  - Non-Benzodiazepine: zolpidem (Ambien)—may be safer; Exzopicione (Lunesta)

- **Other agents:**
  - Antihistamines: diphenhydramine (Benadryl or Tylenol PM), hydroxyzine (Vistaril). Watch these agents!! Cause anticholinergic side effects and may actually worsen symptoms.
  - BP medications: some are used for behavior and may be extremely sedating (propranolol, clonidine, etc.)

**Medications with Significant Anticholinergic Properties**

- Antihistamine (H-1 Blockers)
  - Diphenhydramine (Benadryl)
  - Hydroxyzine (Vistaril)
- Antidepressants
  - Imipramine (Tofranil)
  - Nortriptyline (Pamelor)
- Antipsychotic Medications
  - Chlorpromazine (Thorazine)
  - Promazine (Zyprid)
- Antipsychotic Medications
  - Chlorpromazine (Thorazine)
  - Promazine (Zyprid)
- Anticholinergic Medications
  - Benztropine (Cogentin)
  - Trihexphenidyl (Artane)
- Antidepressants (SSRI)
  - Propranolol (Inderal)
- Antidepressants (SNRI)
  - Duloxetine (Cymbalta)
- Antidepressants (SSRI)
  - Citalopram (Celexa)
  - Escitalopram (Lexapro)
  - Sertraline (Zoloft)
- Benzodiazepines
  - Alprazolam (Xanax)
- Benzodiazepines
  - Lorazepam (Ativan)
- Benzodiazepines
  - Oxazepam (Serax)
  - Midazolam (Versed, Midazolam)
  - Hydroxyzine (Vistaril, Atarax)
- Comitant Medications
  - Diphenhydramine (Benadryl)
  - Doxepin (Sinequan)
  - Nortriptyline (Pamelor)
  - Propranolol (Inderal)
- Alpha-Adrenergic receptor blockers
  - Guanfacine (Tenex)
  - Clonidine (Catapres)
  - Methyldopa (Aldomet)
  - Phenoxybenzamine (Dibenzyline)
  - Hydralazine (Apresoline)
- Gastrointestinal Medications
  - Metoclopramide (Reglan)
  - Metronidazole (Flagyl)
  - Loperamide (Imodium)
  - Opioid analgesics
  - Morphin (Morphine)
  - Oxycodone (Percocet)
  - Hydrocodone (Vicodin)
  - Oxycodone (Percocet)
  - Methadone (Dolophine)
  - Fentanyl (Sublimaze)
  - Codeine (Fudged)
- Cardiovascular Medications
  - Digoxin (Lanoxin)
  - Furosemide (Lasix)
  - Nifedipine (Procardia)
- Muscular relaxants
  - Cyclobenzaprine (Flexeril)
  - Baclofen (Lioresal)
  - Methocarbamol (Robaxin)
  - Tizanidine (Zanaflex)
- Anticholinergic Medications
  - Benztropine (Cogentin)
  - Trihexphenidyl (Artane)
  - Antihistamines
  - Diphenhydramine (Benadryl)
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  - Anticholinergic Medications
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"This list is not all inclusive"
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- Alternative Agents: “Mood Stabilizers”
  - Carbamazepine (Tegretol): Most studied in Dementia with positive results.
    - requires lab monitoring
    - side effects and drug interactions problematic
  - Valproic Acid (Depakote): Many studies have been performed, with positive results.
    - dementia doses require less blood monitoring
    - drug interactions less prevalent
    - update on warning: pancreatitis
    - no increase incidence/update of package information

- Gabapentin (Neurontin)
  - good promise in Dementia
  - pain effect also

- Other mood stabilizers
  - Lamotrigine (Lamictal)
  - Tiagabine (Gabitril)
  - Lithium (Eskalith)

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- Conclusion
  - remember a non-restrained resident is often easier to care for...
  - know medications
  - make sure of compliance
  - use non-drug interventions
  - Thanks!!