SSRIs (Selective Serotonin Reuptake Inhibitors) and SNRIs (Serotonin-Norepinephrine Reuptake Inhibitors)

Serotonin is a chemical found in the gut and brain. In the brain (a *neurotransmitter*), it is believed to have a key role in regulating mood, appetite, anxiety, sleep and may have an effect on memory and learning. **Norepinephrine** (or noradrenaline) is both a hormone and a brain neurotransmitter. Like Serotonin, it is thought to affect mood and anxiety. SSRIs and SNRIs increase concentrations of Serotonin and Norepinephrine by limiting the body's normal processes that would degrade them. Common drugs in these 2 classes include:

SSRIs

- Celexa (citalopram)
- Luvox (fluvoxamine)
- Lexapro (escitalopram)
- Paxil (paroxetine)
- Prozac (fluoxetine)
- Zoloft (sertraline)

SNRIs

Effexor (venlafaxine)
Cymbalta (duloxetine)
Pristiq (desvenlafaxine)

Many patients with depression or anxiety respond favorably to these drugs with a relatively low risk of side effects. Some people require higher doses or two different agents to treat the condition, though only a small number of additional persons respond to a combination. There is a growing body of evidence that none of them may have any more benefit than placebos (sugar pills) in treating depression related to moderate to severe dementia.

Unfortunately, use of any two of these drugs or any one of them with certain other drugs {e.g., tricyclic antidepressants, Lithium, Duragesic, Sinemet, Ultram, Buspar, Remeron, Trazodone, Zofran, Depakote, Reglan, Tegretol, Flexeril, Triptans} may lead to a life-threatening condition called Serotonin Syndrome. This can be fatal and may include:

- agitation, hallucinations, coma
- changes in mental status
- coordination problems or muscle twitching
- racing heartbeat, high or low blood pressure
- sweating or fever
- nausea, vomiting, or diarrhea
- muscle rigidity

For any drug used for depression or anxiety, the facility tracks outcomes and periodically completes a depression test (PHQ9) to objectively measure depression. Though the test is not infallible, it is fairly reliable and results tend to be consistent with family and provider observations. Anxious behaviors placing the patient or others at risk are similarly monitored, though there is not an objective 'test' available to follow anxiety.

When a resident's depressive or anxious symptoms do not respond favorably after several months of use or when side effects attributable to the medication occur, the facility and providers will taper the medication (slowly reduce the dose) to see if it can be discontinued.

It is always important to search for nonmedical or environmental causes or conditions that exacerbate the problem and strategize ways to avoid or control them. Familiar faces (eg, family members) may trigger memories in demented patients that may lead to anxious behaviors as they try to figure it out or escape to a time and place when they were comfortable and unafraid. Hot, cold, light, dark, shapes, people, foods… the list of potential reasons for the worry or distress is long and hard to pin down. In these situations, medications seldom resolve the problem.