

CHIEF COMPLAINT

Medication review, hypertension

COMMENTS TO SPECIALIST

81 year old woman who, over the last year, developed recurrent urinary tract infections. I've treated her with topical estrogen creams without improvement. I've also treated her with anticholinergic medications to improve her overactive bladder symptoms with some improvement. I referred her to a gynecologist, who placed a pessary due to a history of uterine prolapse. Since having the pessary placed, she has not had any urinary tract infections. She continues to take her anticholinergic for her overactive bladder. She states that the anticholinergic has eliminated her nocturia.

I am concerned that her cognitive function has been on a slow but steady decline over the last year. She has a history of hypertension, hypothyroidism, vitamin D deficiency, iron deficiency anemia, vitamin B12 deficiency, anxiety, allergic rhinitis, dyslipidemia, migraine headaches, and uterine prolapse. This patient is worried about contracting infectious diseases during office visits. When I speak with her, she seems to have a difficult time staying on topic. When asked what medications she is taking for her blood pressure she will talk about the medications she is taking for her overactive bladder. She is easily distracted. She does not seem to understand which of her medications are used to treat each medical issues. She appears to have a difficult time with organization in general. She lives alone. She still drives.

I recently changed her hypertensive medications due to insurance coverage and nationwide discontinuation of medication due to contamination. As a result, her losartan was changed to valsartan. After this change, she read the product inserts for her hypertension medications. She is now reluctant to take the medication due to fears of developing cancer, which is the side effect of many of the medications that she has been prescribed. Nevertheless, her blood pressure has been stable on verapamil, losartan, triamterene, and hydrochlorothiazide for many years. I tried to improve her understanding of the medications and how to take them. She continues to have confusion about what medications she is currently taking.

She no longer wants to take losartan. However, her pharmacy sends refill requests (initiated by her) for the medications we previously discussed discontinuing. She reports that she is taking the medication. I communicated with her prior cardiologist, who started the Verapamil. He was unable to tell me why he chose the medication. He is now retired. I don't know if the pharmacy can offer blister packs. I recommended a daily pill dispenser, which she will not use because she fears losing her medication.

She currently takes verapamil ER 180 mg, 1 tablet daily, valsartan 160 mg daily, Synthroid 100 MCG daily, Betamethasone 0.1% topical as needed, Fluticasone nasal 2 puffs twice a day, Latanoprost 0.005% daily, Triamterene-hydrochlorothiazide 37.5-25 mg daily, Celebrex 100 mg daily, Estradiol 1 tablet daily, Advair Diskus 100 MCG 50 MCG daily 2 puffs, Losartan 50 mg twice a day, Zolpidem 10 mg daily, calcium, vitamin D 600 mg, 4 mg cranberry supplement daily, Ventolin every 4 hours as needed, and Solifenacin 5mg daily.

The patient was in the office last week. Her blood pressure was 130/60. At that time, she was taking Triamterene, Hydrochlorothiazide, Verapamil, Losartan, and Valsartan. Lab work done 3 months ago revealed a sodium of 137, potassium 3.8, chloride 99, CO2 30, glucose 96, BUN 16, creatinine 0.99, GFR greater than 60, calcium 9.8, total protein 7.5, albumin 4.2, globulin 3.3, total bilirubin 0.6, alkaline phosphatase 66, AST 29, ALT 20, iron 75, total iron-binding capacity 393, percent saturation of iron 19, ferritin 50.2, vitamin B12 430, folate greater than 20, vitamin D 38.7, urinalysis that showed large leukocytes, small blood, 30 protein, specific gravity of 1.009, WBCs 43, hemoglobin A1c 5.6, TSH 0.973, free T4 1.33. Six months ago, she had a thyroid peroxidase of 92, total cholesterol of 226, HDL 81, triglycerides 84, LDL 128.

CHIEF COMPLAINT

**Medication review,
hypertension**

MAIN QUESTION

Considering patient's anxiety about hypertension medication; potential adverse side effects and drug interactions between anticholinergic and hypertensive medicines; and Verapamil is typically not a first-line medicine for the treatment of hypertension (although she has been on it for many years), what recommendations would you offer with regards to optimizing this patient's treatment for blood pressure?

I am concerned that her anticholinergic medicine for overactive bladder is contributing to her mental status deterioration. Do have any other recommendations on my approach of management of this patient?



Response from eConsult Specialist

DANA RICHARDS, MD, GERIATRIC MEDICINE

NPI: 1000000006

SUMMARY

Treatment options available to the primary care level.

DETAILS

Thank you for your consultation. You are absolutely correct concerning the anticholinergic medication for an older patient ☐ avoid anticholinergic drugs. If there was no clear association between the initiation of an anticholinergic and mental deterioration, I am not certain that the two are connected. If the patient's forgetfulness and decreased attention span are of an acute onset, it would be highly suggestive of acute/subacute hypoactive delirium. In this patient, a range of etiologies of the delirium are possible (UTI, electrolyte abnormalities, cerebrovascular event) with subclinical UTI being the most likely. Consider checking urinalysis and urine culture.

Zolpidem, as well as a number of OTC medications may contribute to cognitive difficulties. If the deterioration of cognitive status is gradual, I would recommend using MMSE (+/- Clock Drawing Test) to assess for potential cognitive impairment and Geriatric Depression Scale ☐ forgetfulness and inability to concentrate are common signs of depression at this age.

It is not uncommon for older patients to use benzodiazepines and medications prescribed by other providers that could affect mental status. Covert alcohol use is not uncommon. Review the patient's social history if not recently done. Consider contacting the patient's next of kin if you are concerned about her ability to self-administer medications. I also recommend requesting home health evaluation for medication management, if that's an option. Home health agencies often provide/fill pill boxes and offer additional resources that could help this patient.

In time (possibly soon) the patient may no longer be able to care for herself independently. I would recommend assessing her AOL and IADL function to establish a baseline, and discuss goals of care with the patient and family. As far as the choice of antihypertensive, I would not recommend using two ACE Inhibitors and an ARB at the same time. Consider stopping one of the ACE Inhibitors and reassess blood pressure. Many elderly patients are at risk of hypotension, orthostasis, and falls. They tend to do best if their blood pressure is between 120-140/70-85. I would advise against extremely tight blood pressure control unless the benefits clearly outweigh the risks.

Comprehensive medication review is definitely advisable. Consider engaging the patient's family to gain additional details about medication. Thank you for allowing me to participate in this patient's care!

Dana Richards

02/10/22 10:29 a.m. PDT

Dana Richards, MD, Geriatric Medicine

Response Date Stamp