MEDICAL PHARMACIES TABLET
DRUG INFORMATION AND NEWS FOR HEALTH CARE PROVIDERS
APRIL • 2012

THE VISUAL ASSOCIATION TEST (VAT) … AN EARLY SCREENING MEMORY TEST FOR DEMENTIA

There are various screening tests used in primary care practice to screen patients for early dementia (e.g. Mini Cog, Clock Drawing Test). Although useful, the results of these tests may be influenced by factors such as a patient's language skills and education. The VAT takes only a few minutes to administer and is not affected by a person's age, education or depression. Patients with vision impairment or severe attention disorders would not be good candidates for the VAT.

The test works this way:

- Six simple line drawings are shown to the patient.
- Each drawing depicts a pair of interesting objects or animals (e.g. an ape holding an umbrella).
- The patient is asked to name each object.
- Recall is tested without delay. The patient is shown one object from the pair and asked to name the other.
- One point is awarded for a sufficiently clear response.
- The maximum score is 6 points.

The six association cards depict a hedgehog on a chair, an ape holding an umbrella, a key hanging from a balloon, a die in a saucepan, a bird in a baby carriage and a flag standing in an inkwell. The theory behind this test is that the patient forms a mental image of the object on a card in an effortless manner, similar to our ability to remember daily life events without a conscious effort. This is referred to as effortless learning. One of the most pronounced symptoms of early Alzheimer's disease is memory impairment. Patients are not able to recall recent experiences associated with day to day living.

An interesting feature of the VAT is that it is highly specific in detecting memory impairment that is characteristic of Alzheimer's dementia. "It is well known that the hippocampus is one of the first brain structures to deteriorate in dementia of the Alzheimer's type". This type of paired associative learning mainly occurs in this area of the brain. Thus a poor score in this test is highly specific for Alzheimer's dementia. "On the other hand, people whose memory functions are intact or relatively mildly deteriorated perform at or near the ceiling of VAT." These types of memory deficits are often caused by a neuropathology elsewhere in the brain.

BLEEDING RISK INCREASES WHEN AN ANTIPLATELET IS COMBINED WITH AN SSRI

Patients taking antiplatelet drugs following an acute heart attack are at an increased risk of bleeding if they are also taking an SSRI (selective serotonin reuptake inhibitor) for co-existing depression. Researchers looked at bleeding risk in more than 27,000 patients taking antiplatelet drugs .

Based on their observations, they found, when compared with ASA alone, the bleeding risk in patients was increased by:

- an average of 1.42 when ASA was combined with an SSRI.
- an average of 2.35 when ASA was combined with clopidogrel (Plavix®) and an SSRI.

When compared with ASA and clopidogrel alone, the bleeding risk in patients was increased by:

- An average of 1.57 when ASA and clopidogrel were combined with an SSRI.

The authors concluded "that patients taking an SSRI with ASA or ASA-clopidogrel following an acute MI are at increased risk of bleeding".

HEPATITIS B VACCINATION FOR PEOPLE WITH DIABETES

Diabetics are twice as likely to contract hepatitis B and develop a chronic infection than people without diabetes. Some experts are now recommending immunization for hepatitis B in adult diabetics under age 60. Older patients may also be vaccinated but the vaccine is less effective.

Eliquis® (apixaban) 2.5 mg tablets Bristol-Myers Squibb (not currently a benefit of ODB)

Eliquis is the most recent oral anticoagulant approved in Canada to prevent venous thromboembolic events (VTE) in adults who have undergone elective knee or hip replacement surgery. It joins Pradax® (dabigatran) and Xarelto® (rivaroxaban). Eliquis and Xarelto directly inhibit Factor Xa in the coagulation cascade, while Pradax is a direct thrombin inhibitor. All three drugs are relatively short-acting, easy to dose, require no monitoring and have no dietary restrictions. There is no reversal agent (or antidote) and compared with warfarin there are fewer drug interactions.

Because Eliquis and Xarelto are direct Factor Xa inhibitors they share many characteristics.

These drugs are contraindicated in patients:

- with a clinically significant bleed or in patients with lesions at increased risk of significant bleeding
- with ischemic or hemorrhagic stroke in the past 6 months
- with spontaneous impairment of hemostasis
- with hepatic disease associated with coagulopathy
- with a creatinine clearance (CrCl) <15 ml/min or in patients undergoing dialysis
- who are pregnant or breast-feeding
- taking strong CYP 3A4 inhibitors (see drug interactions)

These drugs should be used with caution in patients:

- with an increased risk of hemorrhage, such as congenital or acquired bleeding disorders, active ulcerative gastro-intestinal disease, bacterial endocarditis, history of hemorrhagic stroke, thrombocytopenia, platelet disorders, severe uncontrolled hypertension and recent brain, spinal or ophthalmologic bleeding or surgeries
- with elevated liver enzymes
- with mild or moderate liver impairment
- with severe renal impairment (CrCl 15-29 ml/min)

Drug Interactions:

- Eliquis (and Xarelto) are contraindicated in patients taking strong CYP 3A4 and P-glycoprotein (P-gp) inhibitors (e.g. ketoconazole, itraconazole, voriconazole, posaconazole or ritonavir).
- Eliquis (and Xarelto) should be used with caution in patients taking strong CYP 3A4 and P-gp inducers (e.g. phenytoin, carbamazepine, phenobarbital or St. John's wort); inadequate anticoagulation is likely.
- Concomitant use with nonsteroidal anti-inflammatory drugs, ASA and other antiplatelet drugs (e.g. Plavix, Brilinta®) increases bleeding risk and is not advised.

Adverse Effects: nausea (2.6%), anemia (2.6%), confusion (1.4%), hemorrhage (1.1%), post-procedural hemorrhage (0.9%)

Dose & Administration: The recommended dose of Eliquis is 2.5 mg (one tablet) twice daily with or without food. The duration of therapy for hip replacement surgery is 32-38 days and for knee replacement surgery, 10-14 days. The initial dose should be taken 12-24 hours after surgery.

Availability: Eliquis is available in blister packs of 2x10 tablets and 6x10 tablets.

Xarelto® (rivaroxaban) - New Indication…

Xarelto has been approved for the prevention of stroke and systemic embolism in patients with atrial fibrillation (AF) in whom anticoagulation is appropriate; this indication is in addition to its initial approval for VTE prophylaxis in elective hip or knee surgery. The dose for AF is one 20 mg tablet taken once daily with food. Patients with moderate renal impairment (CrCl 30-49 ml/min) should take 15 mg once daily with food. Xarelto should not be given to patients with severe renal disease (CrCl <30 ml/min) and in patients with moderate to severe hepatic disease.

(Refer to the product monographs for complete information)

Editor; Nancy Addington, R.Ph., B.Sc.Phm
References on Request
Medical Pharmacy
300 King Street West, Oshawa, ON L1J 2K1
T: 905-728-6277 • F: 905-728-9992

Medical Pharmacies is pleased to sponsor the ***OLTCA's Quality Improvement Recognition Program***. Please join us at the ***Together We Care*** Awards breakfast, Tuesday, April 2nd, 2012 to find out who is this year's recipient.