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wardmm
medication management

Experts in aged care medication management

From the Clinical Director

Dr Chris Alderman, Director of Clinical Excellence, Ward MM.

Medication usage in the aged care setting is complex and extensive. Data from Ward MM medication reviews confirms that residents take on average over eight regular medications each day, in addition to medicines that are taken on a "when required" basis. Antipsychotic drugs are one class of medicine attracting attention in the aged care setting, in particular in regards to the use of these drugs for the management of Behavioural and Psychological Symptoms of Dementia (BPSD).

Prior to the early 1950s no effective antipsychotic drug therapy was available for clinical use. It was only after the discovery of chlorpromazine (Largactil) that clinicians had access to drugs that specifically targeted the disabling and distressing symptoms associated with psychotic disorders. Shortly afterwards haloperidol was discovered and was to later become a very important addition to the psychotropic pharmacopeia.

These early examples of antipsychotic drugs were able to address symptoms such as hallucinations, delusions and disorganised behaviour that are seen amongst people with schizophrenia. Historically these medications and those closely related have come to be known as

Subsequently new examples of antipsychotic drugs began to make an impact. Examples of these drugs include risperidone, olanzapine, quetiapine. These drugs came to be known as the second generation antipsychotics (or alternatively, the atypical antipsychotics). Atypical agents have a profile of adverse effects which is distinctly different to the earlier predecessors. However, after these agents had been in use for a decade or more it became apparent that they also had side effects, and that would need to be used with great caution.

Initially, the use of these medications was limited to the treatment of schizophrenia and other closely related psychotic disorders. As the years have passed,

the typical antipsychotics, or first-generation agents. Some examples of these medicines have been in continuous clinical use or nearly 70 years, suggesting that although they are certainly associated with known side effects, they are highly reliable in their therapeutic effects.

In the early 1990s new examples of antipsychotic drugs began to emerge. The first of these was a drug called clozapine, which has come to be regarded is by far the most effective of all antipsychotic drugs. Even so, clozapine is associated with a relatively high incidence of very serious side effects such as life threatening blood dyscrasias, seizures and myocarditis. For this reason although clozapine is very effective, it is usually reserved for the most severe cases of treatment resistant schizophrenia.

antipsychotic drugs are now being used for a wider range of indications. These medicines are routinely used in the treatment of bipolar affective disorder and other serious psychiatric syndromes.

Perhaps the most controversial issue relating to antipsychotic prescribing arises from their in a primarily symptom-driven context: an example is when the drugs are used for the symptomatic management of behavioural and psychological symptoms of dementia (BPSD). Use for these purposes is regarded as "off label" prescribing, where the medicine is used for a purpose other than that described in the approved product information. In this edition of the Ward MM newsletter we explore side effects of the antipsychotic drugs so widely prescribed in Australia's aged care facilities.

FEATURE ARTICLE

Adverse effects of antipsychotic drugs

Both the first generation antipsychotic drugs and the more recently introduced atypical agents are associated with potentially serious adverse effects when prescribed to elderly people. An RMMR from Ward MM may assist in identifying issues.

Particularly for those treated with older antipsychotic drugs, the occurrence of Extra-Pyramidal Side Effects (EPSE) are an important issue. The term EPSE is used to describe a range of variety of movement disorders. These can be acute, developing as quickly as hours after the initiation of treatment), or in some cases, chronic (after a long period of treatment).

Acute EPSE include syndromes such as acute dystonia (acute muscle cramping affecting the muscles in the face, jaw, neck, limbs and back), akathisia (motor agitation) and parkinsonism (which can closely resemble features of idiopathic Parkinson's disease. Tardive dyskinesia (TD) is the most common late occurring movement disorder, and usually manifests as periodic involuntary movements of tongue face and jaw. TD usually develops after long-term use of antipsychotics.

Acute severe EPSE can be painful and distressing, and may require treatment with anticholinergic drugs such as benztropine. However, potent anticholinergic drugs also carry their own risks, such as acute urinary retention,

Another important aspect of the burden of adverse effects associated with antipsychotic drugs in aged care is that related to the metabolic impact of these medications. When used over an extended. of time a range of metabolic adverse effects may become apparent. These include significant weight gain, impaired glucose tolerance, and elevation of serum lipids. It is important to note that these metabolic impacts bring with them significantly increased cardiovascular risk, meaning that those people affected may be at increased risk of serious complications such as myocardial infarction and stroke.

Use of antipsychotics for the management of BPSD is also associated with a range of other adverse effects which can be subtle and easily missed. For example research confirms that people treated with antipsychotics are at increased risk of falls and associated fractures. This finding may be related to sedation, effects upon balance, impaired eyesight or postural hypotension. Various pharmacoepidemiological research studies also suggest that there may be associations between antipsychotic treatment and

tachycardia and delirium. All of this means that preventing EPSE by using low dose, short term treatment is the best approach.

other serious adverse outcomes such as pneumonia and stroke.

The Ward MM freecall number 1800 WARDMM (1800 927 366) can be used at any time to seek advice about the issues raised here, or indeed any medication-related matters.

QUICK TIP

NSAIDs and kidney function

Although widely prescribed, it is not necessarily appreciated that Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) carry a variety of risks, one which is the possibility of acute impairment of renal function. This is a risk associated with all NSAIDs, including Cox-2 inhibitors such as celecoxib and also meloxicam. The possibility of sustaining impaired kidney function is markedly increased by the presence of a range of specific risk factors such as extreme old age and pre-existing dehydration.

Concurrent treatment with diuretics such as frusemide, as well as ACE inhibitors – the combination of these three agents is sometimes referred to as the "triple whammy" – a major predisposing factor for acute renal failure. Older people living in a community-based setting may be at extra risk because some of these drugs can be purchased without a prescription on an OTC basis.

Fluid retention is the most common NSAID-related renal complication, occurring to some degree in nearly all older people treated with NSAIDs, but clinically detectable oedema occurs in less than 5% of patients and is usually readily reversible on discontinuation of the NSAID. Electrolyte abnormalities, notably hyperkalaemia, are seen infrequently and occur in specific at-risk patients.

LATEST NEWS

Ward MM presents research findings

Ward MM have Australia's largest privately held pharmacoepidemiology data base, allow us to use aggregated and de-identified information to gain insight into patterns of medication use in and across aged facilities around the nation. We have been fortunate to have the opportunity to present four research studies at the largest pharmacy conference in Australia – PSA 2016, which will be be held in Sydney at the end of July 2016.

The studies will include:

- An analysis of the risk of serotonin toxicity associated with antidepressant drug combinations
- Exploration of the risk of treatment failure associated with the combination of clopidogrel and some PPIs
- Discussion of Patterns of statin therapy in aged care facilities
- Examination of prescribing of high-potency analgesia in aged care

Ward MM are always keen to explore how data can be leveraged for the benefits of clients and residents. Ideas for future projects are always welcome.

YOUR QUESTIONS ANSWERED

Notes from facilities serviced by Ward MM

It is quite common for us to receive similar enquiries from more than one facility in our network. In this section we summarize questions with a common basis. As a part of our "connect – network – share" ethos, we share the information with all of our facilities.

Q. What is the Pharmaceutical Benefits Scheme?

A: The Pharmaceutical Benefits Scheme (PBS) is a system that allows subsidised distribution and supply of medicines for Australian citizens. The principal of the system is that nobody should need to do without a medicine that they need simply because they are unable to meet the costs associated with that treatment. A comprehensive assessment process is used to derive the list of medicines which are included on the Pharmaceutical Benefits schedule. This process assesses the efficacy of the treatment as well as it's cost-effectiveness, and sharing that good value for money is delivered.

Even when a medicine is listed on the pharmaceutical benefits schedule, this does not necessarily mean that this drug can be supplied free of charge to the patient. In most cases a co-payment is levied by the pharmacy, but this is substantially reduced for eligible pensioners. It is important to note that PBS medicines can only be supplied to Holders of a current Australian Medicare card, meaning that visitors from overseas are unable to access the subsidised medicines.

It is important to note that if a medication is not listed on the PBS schedule, this does not necessarily mean that it is regarded as ineffective or too expensive to warrant subsidy. Reasons for not listing can be many and varied, and may include a commercial decision on behalf of the sponsor company that may not want to make a substantial investment in fees and charges to achieve listing if the product is nearing the end of its patent life.

For eligible war veterans and their dependents, a supplementary schedule of additional products is also available for the management service related illnesses and disabilities. Known as the Repatriation Pharmaceutical Benefit Scheme (RPBS) this system is generally used to provide highly specialised products.

In most states and territories of the Australian Commonwealth, State health departments have also entered into an agreement that allows the PBS/RPBS to be used as a mechanism to fund medication supply for non-admitted patients at public hospitals (e.g. outpatients and at the time of discharge).

STAFF NEWS

Meet your Ward MM Team Member

Chris Alderman, Clinical Director

Most meaningful moments… have been in watching the growth and achievements of my own family - I'm proud of the people that they are - their kind and considerate approach to life, their intelligence and work ethic, and the way they all manage to make our big clan functional - with 5 children and various careers, that's quite a tall order!

My biggest challenge… being objective at the footy - I should probably be more generous towards the umpires, but I find it hard to watch my team (the Adelaide Crows) getting a raw deal from the refs!

I'd be lost without ... the chance to skip away to our beach house now and then. It can be a trip for two people, or for all of us - sunshine, sand, and freshly caught seafood are good for the soul...