Bright Light & Melatonin May Improve Quality of Life of Dementia Patients

A Dutch study of 189 residents of 12 assisted-care facilities examined the effect of bright light and melatonin in patients with dementia. The patients “were randomized to provide daytime bright light (1000 lux) or dim light (300 lux)” and “melatonin (2.5 mg/day) or placebo for a maximum of 3.5 years”.

Bright light and melatonin were found to improve sleep (e.g. reduced nocturnal restlessness and awakenings) and reduced agitated behaviour. Bright light alone tended to slightly reduce “cognitive decline by 5%, depressive symptoms by 19% and physical functional decline by 53%. Melatonin alone tended to aggravate behavioural withdrawal and depression; its effects on restlessness and nocturnal awakenings emerged slowly”.

The authors concluded that the combination of bright light and melatonin improved sleep and the quality of life of these residents at a modest cost. The effects on cognition were described as modest but comparable to marketed medications (e.g. cholinesterase inhibitors).

NSAID-Acetaminophen Combination May Increase GI Events

Acetaminophen has traditionally been considered as a safer option than NSAIDs (non-steroidal anti-inflammatory drugs) with respect to the risk of adverse effects on the GI (gastrointestinal) tract. A retrospective study of over 644,000 elderly patients in Quebec over a 7.5 year period evaluated medication use and the consequent risk of hospitalization.

It was found that “using acetaminophen with a traditional NSAID more than doubled the risk for hospitalization compared with low dose acetaminophen alone”, irrespective of the administration of a PPI (proton pump inhibitor). Patients who took NSAIDS or high dose acetaminophen (> 3 G/day) and who did not take a PPI were also at a significantly greater risk for hospitalization.

Warfarin & High Protein Diet . . . Another Potential Interaction

The interaction between warfarin and food high in vitamin K is well established. A small number of case reports illustrate an interaction between warfarin and a high protein diet. Diets such as the Atkins diet and the South Beach diet are popular in people attempting to lose weight. The diets focus on reducing or eliminating carbohydrates and increasing protein intake.

Patients taking warfarin who dramatically increase their protein intake may decrease their INR and increase the risk of thromboembolism. Conversely if a patient who is taking warfarin has a stable INR value while consuming a high protein diet suddenly discontinues their diet, they are at risk of increasing their INR and risk of hemorrhagic events.

The inter-patient variability and largely unknown effect of changes in diet and weight on warfarin levels can be challenging for the clinician. Patients should be instructed to inform their physician of any major changes in their diet and close monitoring of INRs is suggested to determine if a change in warfarin dose is warranted as a result of these changes.

The nature of this study does not provide us with a definitive answer, however it does indicate that the effect of acetaminophen on GI bleeding risk may not be as benign as we have assumed.

Dementia More Common in Women After Age 90... The odds for developing dementia in women who are older than 90 almost doubles but remains stable in men. Women with a higher education are less likely to develop dementia but education levels in men appear to have no effect on their risk, according to a study reported in Neurology. The differences may be due to different education levels between the men and women in the study, longer survival in women after diagnosis or a “healthy-survivor effect in men”.

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Aclasta 5 mg/100 ml I.V. Solution
zoledronic acid (Novartis)
(currently a limited-use benefit of ODB for
treatment of Paget’s disease)

Aclasta, a bisphosphonate, is a bone metabolism
regulator indicated as a once-yearly intravenous
infusion for the treatment of osteoporosis in
postmenopausal women and for the treatment of
Paget’s disease in men and women. Aclasta should
not be given to people less than 18 years of age.

Contraindications & Precautions:

• Hypersensitivity to Aclasta or any
  bisphosphonate is a contraindication.
• Aclasta is contraindicated in pregnancy and
  lactation.
• Aclasta is contraindicated in patients with non-
  corrected hypocalcemia at the time of infusion.
• Aclasta is not recommended for patients with
  severe renal impairment (creatinine clearance
  < 30 ml/min).
• Patients taking Zometa (which contains the
  same active ingredient as Aclasta) should not be
given Aclasta. Other bisphosphonates should not
be given concomitantly.
• Adequate calcium and vitamin D levels should
  be maintained and individually assessed.
• Oncology patients (e.g. with hypercalcemia of
  malignancy) and/or patients with pre-existing
  renal disease may experience a serious
deterioration of renal function which may
  progress, rarely, to renal failure and dialysis.
• Prior to treatment with Aclasta, preventative
dental care is recommended due to the possible
  increased risk of osteonecrosis of the jaw in
  patients taking bisphosphonates (particularly
  when invasive dental procedures such as root
  canal or dental extraction are performed).
• Severe and sometimes incapacitating bone, joint
  and/or muscle pain has been reported in patients
taking Aclasta.
• Caution should be used in patients taking
  aminoglycosides (e.g. gentamicin), loop diuretics
  (e.g. furosemide) and potentially nephrotoxic
  drugs (e.g. non-steroidal anti-inflammatory
  drugs).

Drug Interactions:

• Co-administration with an aminoglycoside may
  lower serum calcium levels for prolonged
  periods. Caution is advised.
• Loop diuretics may increase the risk of
  hypocalcemia, requiring caution.
• Drugs which are potentially nephrotoxic may
  increase the risk of progression of renal
  dysfunction.

Adverse Effects: The majority of adverse effects
occur within the first 3 days of administration. The
most commonly reported adverse effects include:
fever (18%), myalgia (9%), flu-like symptoms (8%),
arthralgia (7%) and headache (6%). There have
been reports of atrial fibrillation in some patients
which may be associated with Aclasta. At this time it
is not known with certainty if Aclasta was actually the
cause of the atrial fibrillation but a potential trend has
been identified. More study is required.

Dose & Administration: The 100 ml of Aclasta
5 mg/100 ml is administered intravenously at a
constant infusion rate over a minimum of 15 minutes
once a year. On the day of infusion patients should
eat and drink normally. At least 500 ml of fluids
should be consumed before and after the
administration of Aclasta to decrease the risk of renal
impairment. Acetaminophen or ibuprofen
administered shortly following Aclasta dosing may
reduce post dose symptoms (which occur within the
first 3 days after administration).

Availability: Aclasta is available in 100 ml bottles
containing 5 mg of ready-to-infuse zoledronic acid.
(Refer to product monograph for complete information)

Discontinued...
Fiorinal Capsules (ASA-caffeine & butalbital)
Halog Cream 30 G (halcinomide)
Kaletra Soft Gel Capsule 133.3/33.3 mg (Kaletra
tablets 200/50 mg & Kaletra Oral Solution 80/20 mg/
ml are replacing the Soft Gel format)

Medical Pharmacies Group is pleased to
be a partner in the Long Term Care Homes
Common Assessment Project pilot study
of automated transfer of medication
information to the Medication Section of
RAI-MDS.