Update on 2017 NICE guidelines for the management of Parkinson’s disease (PD)

The 2006 NICE guidelines have been updated this year, and as per the 2006 document, the guideline advises on the care of people with Parkinson’s but does contain a number of changes and new sections including the management of Impulse Control Disorders and patient nutrition, and also provides more detailed advice on the palliative care of PD patients.

**Summary of Recommendations**

**PD diagnostics**
Clinicians are not to use SPECT, PET, MRI and MR volumetry in the diagnosis of Parkinson’s disease. These modalities remain at the disposal of those undertaking PD clinical trials. Levodopa challenges, amphetamine challenges, and smell tests are also not to be used.

**Neuroprotection**
Physicians are not to prescribe vitamin E, Coenzyme Q10, dopamine agonists and MAO-B inhibitors as neuroprotective agents.

**Motor Symptoms**

**First line Treatment**
Clinicians are advised to offer levodopa as first line therapy to those patients whose motor symptoms impact their quality of life. MAO-B inhibitors, DA agonists and levodopa can be considered for patients whose quality of life is not impacted by PD. Ergot derived dopamine agonists are not to be offered first line.

**Patient communication**
Information should be given in oral and written form to patients and their carers.

The possibility of impulse control disorders, psychotic symptoms, excessive sleepiness and sudden onset of sleep with dopamine agonists should be discussed, and documented as having been communicated to the patient.

**Motor complications**
Clinicians are advised to initiate a non-ergot dopamine agonist as adjunctive therapy. Ergot derived therapies should only be considered in patients who are inadequately controlled on the former.

Amanantadine can be considered in patients with dyskinesia who are inadequately managed on existing therapy.

**Impulse control disorders (ICDs)**
Clinicians are advised that DA agonist therapy, a history of impulsive behaviour, alcohol consumption and smoking present a higher risk of developing an ICD which can arise at any disease stage. Patients must be told about the different ICDs, who to contact if an ICD develops and that if an ICD does arise, that their DA treatment will be reviewed and may be altered. This discussion should take place at each review and particularly when any modifications to therapy are made.

Written and oral information on ICDs must be given to patients and documented.

**Management of ICDs**
If a patient develops an ICD, its impact on patient life, possible treatment, including reducing or stopping dopaminergic therapy should be discussed. Dopamine agonists should be slowly reduced first monitoring for improvement in the ICD and any symptoms of dopamine agonist withdrawal. Specialist CBT is also recommended if reduction in dopamine therapy is ineffective.

**Non motor symptoms**

**Sleep**
Modafinil is only recommended for the treatment of excessive daytime sleepiness once reversible causes have been identified and treated.

**RBD**
Clonazepam or melatonin can be considered for the treatment of RBD.

**Nocturnal Akinesia**
Either levodopa or oral dopamine agonists can be considered for the treatment of nocturnal akinesia. If these are not effective, physicians should consider rotigotine.

**Orthostatic Hypotension**
Review of causes of hypotension such as anti-hypertensives, dopaminergic, anticholinergics and antidepressants is advised. Where treatment is required clinicians should use midodrine. If midodrine is contraindicated or not tolerated fludrocortisone can be started.

**Depression**
Clinicians are now referred to the separate NICE guidance on management of depression in chronic physical health problems.

**Hallucinations**
The first line management of hallucinations in PD is a reduction in medication. Quetiapine is now recommended for use in patients without cognitive impairment and clozapine is recommended if standard therapy is ineffective. Olanzapine should not be offered.

**PDD**
Cholinesterase inhibitors should be offered to patients with mild to moderate PDD and can be considered in those with more severe disease. Memantine should only be considered if cholinesterase inhibitors are contraindicated.

**Drooling**
Pharmacological intervention can only be considered if non pharmacological approaches such as SALT are unavailable or unhelpful. Glycopyrronium can then be considered and if ineffective, patients can be referred for Botulinum toxin type A. Other anticholinergics (such as atropine drops) are only recommended if there is minimal risk of cognitive side effects.

**Physiotherapy and OT**
The 2017 guideline suggests that physiotherapy be offered to patients with PD who are experiencing balance or motor function problems, and OT offered to those who are having difficulties with ADLs.

**Nutrition**
This is a new section and physicians are advised to refer patients to a diettian for specialist advice. Patients are advised to take their meal with the highest protein content towards the end of the day but a total reduction in protein intake should be avoided. Vitamin D supplementation is now recommended, whereas creatine supplements are not to be offered.

**Surgical management of PD**
The content on specific target for DBS has now been removed and clinicians are now advised to consider surgery only in cases where best medical therapy has failed.

**Palliative Care**
This advice has been expanded and clinicians are to offer patients and their carers oral and written information on disease progression, adverse effects in advanced PD, advanced care planning, options for future management, as well as information on all the available services for their care.

**Conclusion**
The NICE guideline on PD offers evidence based guidance on the management of patients with PD, provides clear guidelines and standards for the management of the disease and will allow for the organisation and delivery of optimal care to patients throughout the UK.