Assessment of patients with Parkinson's Disease in the ED at Hornsby Ku-ring-gai Hospital

Marion Harris , Aged care Services in Emergency Clinical Nurse Consultant NSLHD

Introduction

Parkinson's Disease (PD) is the second-most common neurodegenerative disorder, after Alzheimer's disease. Literature and research evidence indicate the need for best practice guidelines to be developed for the management of patient's with Parkinson's (PWP) disease in hospital. One of the challenges is the early implementation of these guidelines upon ED presentation. An electronic alert system in the Emergency Department would assist in alerting staff to the PWP status.

The abrupt interruption of medication administration or changes in medication schedules may result in reduced comfort, prolonged recovery, increased morbidity rates, length of stay and cost of care.' (Hou et.al 2012). Sustaining pharmacological management is challenging. Omission of regular medication, timing of levodopa administration and inappropriate prescribing of anti-dopaminergic drugs are three areas of concern.

Injuries, infections and poor control or omission of PD medications are the important risk factors for deterioration of PWP for admissions with and without surgery.

Improved outcomes are achievable with interdisciplinary care including input from neurologists, psycho-geriatricians and social workers.(Gerlach 2010)
A clinical pathway specific to the needs of PWP, helps to identify priorities of care, including confirmation of the home drug regime, by early referral and involvement of pharmacy and allied health.

Aim

To develop and implement a clinical pathway to assist in the identification and management of PWP presenting to the Emergency Department (ED)

Method

Data collected over the 2012-2013 shows one PWP presented to the ED at Hornsby Ku-ring-gai every two days. A multidisciplinary working group was initiated by the Aged Services Emergency Team CNC to raise staff awareness of presentations of PWP to the ED. Representatives from nursing, allied health, pharmacy and a consumer were invited to develop a pathway and review current practices with respect to the management of PD in ED.

Method continued…

The following areas were identified for improvement –

•Admission and assessment

When a patient with a confirmed diagnosis of PD presents to ED, the PD diagnosis is entered into the alerts/diagnosis/problems section in Firstnet which generates two actions:-

1. A green PD icon appears on the eMr tracking board to alert staff that this patient has PD and that medications are time critical. Once this information is on the data base, the icon will appear on each consecutive ED presentation.
2. An automatic electronic referral to pharmacy census task list is generated for medication review.

•Timely access to medications

Electronic referral to pharmacy on arrival allows the pharmacist to prioritise their medication reviews and to track the whereabouts of those patients who are transferred to the ward after hours.
A green '**PARKINSON'S DISEASE**' medication alert sticker is applied to medication charts to alert staff of time critical medications. This is used throughout the hospital.
A PD pharmacy kit containing a large range of PD medications, a PD drug identification chart, and PD drug information sheet has been provided by Pharmacy to ED, and the acute wards for use after hours when no pharmacist is on duty.

•Timely referral to allied health professionals

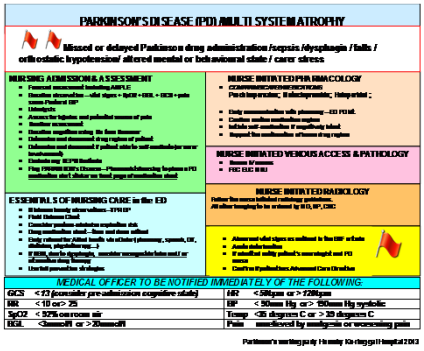
Early referrals are made in ED for allied health to follow-up on the ward or in emergency as required.

•Education sessions

Joint education sessions with the pharmacist and the ASET CNC were provided to nursing, medical, and allied health staff in the acute medical and surgical wards, ED, ICU and day surgery/theatres regarding these new initiatives. A self-directed learning package for nursing staff was made available to clinical nurse educators to promote quality management and care for PWP. The implementation of the PD clinical pathway was well received by clinicians and has improved the multidisciplinary referrals and assessment of these patients upon entering the acute care sector via the Emergency Department.

Results

- Education of 160 clinical staff via inservice sessions and the availability of a self directed learning module resulted in increased staff knowledge around PD management for surgical and non surgical patients and the implementation of best practice guidelines.
- Increased ED referrals to allied health .
- Prompt Pharmacy review in ED within one hour.
- Decrease in delay and/or omission of PD medications by 30%
- Development of clinical pathway for PWP in ED .



Conclusion

The main benefits of the project were:-

- Prompt identification of PWP at ED presentation.
- Prompt medication review in ED by pharmacist.
- Provision of after hours PD medication.
- Raised awareness of the health needs for PWP and their carers amongst staff.
- Reduced incidence of medication errors by omission and/or delays.
- Improved patient and carer journey by early identification on eMr, particularly if the presentation is not related to PD or if the patient is non verbal.

Acknowledgements:

Executive Sponsor. K.Thorpe DONM HKH.

Working party: C.Richards, S Lay, W.Chan (Pharmacy) M.Perry (Clinical Governance) R.Ferguson, L.Hillard, B. Andrews (NUM)

R.Stippo, J.Blair (CNE) S.Peterson (OT) M. Harris, N.Yazdani (Agedcare CNC) J.Winning (public consumer), Louise Toohey, Jo Davis, Erin Howard-Gillis (eMr applications specialists and support personnel)

References

Gerlach, O, Broen, MPG, van Domburg, PHMF, Vermij, AJ, Weber, WEJ 2012, 'Deterioration of parkinson's disease during hospitalisation: survey of 684 patients' *BMC Neurology* vol.12, no.13

Gerlach,O, Winogrodzda, A, Weber,W 2010, 'Clinical problems in the hospitalised Parkinson's disease patient: Systematic review', *Movement Disorders*, vol.26, no.2,pp197-208

Hou,JG, Wu, LJ, Moore,S, Ward, C, York, M, Atrassi, F, Fincher, L, Nelson, N, Sarwar, A, Lai, E.C.2012, 'Assessment of appropriate medication administration for hospitalised patients with Parkinson's disease.' *Parkinsonism and Related Disorders*, 30(2012) 1-5

Contact Details

Marion Harris ASET CNC Hornsby Hospital
Marion.harris@health.nsw.gov.au