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Medication Non-Compliance among the Elderly with Dementia

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Abstract

Medication noncompliance is a challenge among the elderly patients where the problems may be due to polypharmacy, medication side effects, cognitive impairment, depression or social factors. Noncompliance causes complications which increase utilization of healthcare resources and healthcare workers often end up disguising medications in food and drinks to ease and improve compliance, particularly among the elderly with dementia and behavioural symptoms.

Keywords: Medication noncompliance; Elderly; Dementia; Covert medications

Introduction

As the world's population age, the elderly, defined as aged 65 and above will be the major consumers of healthcare resources. The Alzheimer's Disease International estimated that by 2050, there will be 131 million people living with dementia worldwide and most of the increase in dementia will be in developing countries.

The elderly have multiple background comorbidities which makes them more likely to have multiple prescription medications to take daily. Non-compliance with prescription medication is thought to affect approximately 50% of the older patients on more than 5 prescription medications [1]. Complications related to medication non-compliance include poorly controlled diseases, increased need for hospitalization, mortality and disability. Yee reported that over 12% of emergency department visits were due to drug related problems like adverse drug reactions and noncompliance [2].

This short case presentation looks at the elderly with noncompliance to medication, the consequences of non-compliance and the ethical dilemma of deceiving the elderly to take the medications by mixing them in various food substance.

This is a Case Report of Madam MQ

Madam MQ is an eighty five year old lady with moderate to severe dementia complicated by neuropsychiatric symptoms of dementia. She was diagnosed with dementia few years ago and was followed by psychiatrist for psychosis, as she used to have visual and auditory hallucinations but was subsequently lost to follow up because her family refused treatment with antipsychotic medications. Her behavioural symptoms have settled over the last year and she has been home bound, walking with assistance and is dependent on her full time caregiver for her activities of daily living. She also has oropharyngeal dysphagia and needs modified diet to reduce aspiration risk.

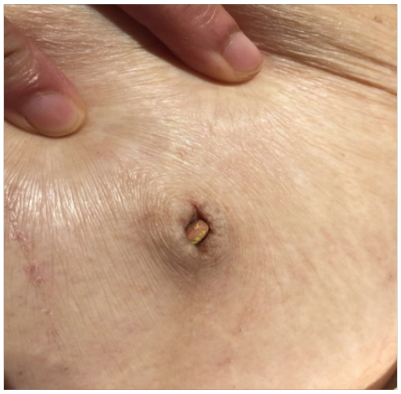

Figure 1: Umbilical lesion.

She was admitted for a poorly healing foot ulcer. Physical examination showed a thin lady who was well, and abdomen examination was reported that she has a suspicious "umbilical lesion" as shown in Figure 1. The lesion was later found to be a pill, Figure 2, which she hid in her umbilicus a while back. Her caregiver complained of non-compliance with medication with

this lady, particularly medications which require her to swallow the whole pill. The caregiver has found pills on the floor or hidden in her purse. The rest of her medications were pounded and fed to her hidden in thick syrup, and even then, she spits out her medication frequently.

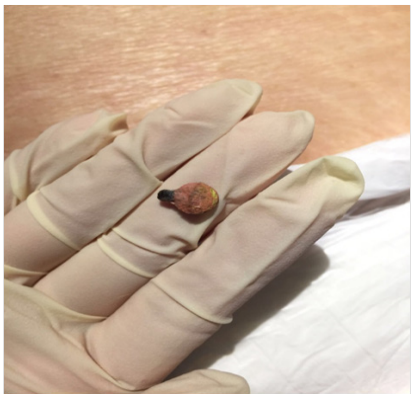

Figure 2: Pill expressed from the umbilicus.

The ward pharmacist was consulted on the nature of this pill, and was thought to be Nifedipine LA which could not be pounded and she is required to swallow whole. This lady has a long list of medical conditions which included hypertension, diabetes mellitus, chronic kidney disease (CKD), hyperlipidaemia, ischaemic heart disease and peripheral vascular disease. Her usual medication list included Metformin, Glipizide, Nifedipine LA, Atenolol and Lisinopril. Some of her medications were discontinued, such as metformin which is not suitable for her CKD and caused her anorexia with weight loss.Nifedipine LA was swapped with Amlodipine because it should not be crushed.At discharge, she had Sodium bicarbonate, frusemide and Vitamin B12 added to her list. Sodium Bicarbonate was necessary because of metabolic acidosis due to CKD and Frusemide to maintain urine output as she was slightly fluid overloaded on admission. Nifedipine LA was swapped with Amlodipine which can be crushed.

Discussion

Adverse drug reactions (ADRs) are common among the elderly, its occurrence being contributed by age related physiological changes in pharmacokinetic and pharmacodynamics, multimorbidity and polypharmacy [3]. There is no formal definition for polypharmacy, and most defined it as taking more than 4 medications. Since the elderly are susceptible to polypharmacy and ADRs, we need to define appropriate prescribing. Appropriate prescribing for a medication includes an indication which has clear evidence based for its prescription, is cost effective and the drug is well tolerated. Inappropriate prescribing is associated with increased risk of ADRs, morbidity, mortality and healthcare utilization [4,5].

For the elderly with dementia, polypharmacy is even more rampant. In addition to their prescriptions for medical conditions, they have prescriptions for dementia associated problems such as antipsychotics and sedatives which may or may not be appropriate for managing the non-cognitive symptoms of dementia. The elderly with dementia have cognitive symptoms which make communication with their caregivers challenging, hence under-reporting of adverse effects. People with dementia are often not included in trials or guidelines so it is difficult to make clear treatment choices. Medications for secondary preventions of chronic diseases may not be beneficial to the elderly with dementia since their life expectancies are often shorter than their peers without dementia, and mortality is higher with polypharmacy [6].

The elderly with dementia have difficulties with medication compliance for several reasons. In the early stages of dementia, amnesia and executive dysfunction may cause them to forget their medication routine , medication names, indications, dosing schedules and become disorganised, social problems like cost, difficulties with topping up medications, visual impairment, poor dexterity, etc. [7] At later stages, the elderly with dementia may develop neuropsychiatric symptoms of dementia where insight is lost. Functional dysphagia is a common symptom at that stage of dementia where medication compliance becomes a struggle for the caregivers. There is no data on medication compliance among the elderly with dementia and neuropsychiatric symptoms.

In hospitals and nursing homes, it is not unusual for the care staff to disguise medications in food and drinks to improve compliance and save time during medication rounds. The practice of caregivers hiding medications in patients' food or drinks was raised with the Scottish Parliament in 1997 when Mr. Hunter Watson discovered his mother was sedated without consent in a nursing home by hiding her medications in her meals. The ethical argument for concealin gmedications for people with mental disorders who lack capacity, which include dementiais given a short discussion.

Autonomy is being challenged against beneficence/non-maleficence. Left to the patient's autonomy, compliance is often challenging, with reports of forcibly ingesting or injecting the medications and physical restraint use, which are the usual ways of intervention. Intervention is thought to be necessary to restore autonomy among patients with mental disorders. Covert medication involves crushing the pills or prescribing medications in syrup forms, so it goes undetected by the patients. Most caregivers prefer this method than forcibly restraining the patients or using injections to ensure compliance, as it is less distressing to see their loved ones being restrained or forced against their wills. In an acutely ill patient with dementia, delay in treatment while persuading the patient to take medications by conventional manner may worsen the patient's condition. For the delirious elderly who is unable to give consent, withholding medications can be considered as depriving the patient his/her rights to treatment. Family's consent, involvement and cooperation with care is reassuring to the caregivers [8].

Covert medications may be a convenient practice in institutions where staffing level is short, but there are other considerations such as difficulties in identifying medication side effects if the patients or family are not aware of the actual medications

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consumed in the mixture, betrayal of trust where patients/family feel they were not consulted or it can even be considered a potential for civil trespass. Among the elderly with dementia, they often lack the capacity to give consent to medications prescribed for them, therefore unable to understand the potential ADRs from the medications they are taking. Covert administration of medications takes away the physician's responsibilities of explaining the potential harmful effects of medications to these vulnerable patients and risk breaking the trust between doctor and patient [8,9].

Conclusion

Medication compliance among the elderly is a challenge because of multiple factors and among the elderly with dementia, it is even more challenging. Disguising their medications in the food and drink is commonly practiced but is it the right thing to do where the alternative is often a struggle for the caregivers to forcibly enforce compliance. It is perhaps more sensible to obtain consent from the patient's family before we covert medication, and to clearly state the potential side effects for each and every medication and the indications for doing so.

References

1. Fialova D, Topinkova E, Gambassi G, Finne-Soveri H, Jónsson PV, et al. (2005) Potentially inappropriate medication use among elderly home care patients in Europe. JAMA 293(11): 1348-1358.
2. Yee JL, Hasson NK, Schreiber DH (2005) Drug related emergency department visits in an elderly veteran population. Annals of Pharmacotherapy 39(12): 1990-1995.
3. Cherubini A, Ruggiero C, Gasperini B, Dell'Aquila G, Cupido MG, et al. (2011) The prevention of adverse drug reactions in older subjects. Curr Drug Metab 12(7): 652-657.
4. O'Mahony D, Gallagher P (2008) Inappropriate prescribing in the older population: need for new criteria. Age Ageing 37(2): 138-141.
5. Tommelein E, Mehuys E, Petrovic M, Somers A, Colin P, et al. (2015) Potentially inappropriate prescribing in community-dwelling older people across Europe: a systematic literature review. Eur J Clin Pharmacol 71(12): 1415-1427.
6. Onder G, Liperoti R, Foebel A, Fialova D, Topinkova E, et al. (2013) Polypharmacy and mortality among nursing home residents with advanced cognitive impairment: results from the shelter study. J Am Med DirAssoc 14(6): e7-e12.
7. Smith D, Lovell J, Weller C, Kennedy B, Winbolt M, et al. (2017) A systematic review of medication non-adherence in persons with dementia or cognitive impairment. PLoS ONE 12(2): e0170651.
8. Latha KS (2010) The noncompliant patient in psychiatry: The case for and against covert/surreptious medication. Mens Sanna Monogr 8(1): 96-121.
9. Whitty P, Devitt P (2005) Surreptitious prescribing in psychiatric practice. Psychiatr Serv 56(4): 481-483.

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