Management of inappropriate sexual behaviour in frontotemporal dementia: a case study

Dr Stefan McKenzie, Core Trainee, Sheffield Health and Social Care NHS Foundation Trust.
Dr Zoe Kwan, Consultant Old Age Psychiatrist, Sheffield Health and Social Care NHS Foundation Trust.
Dr Velusamy Sivakumar, Consultant Old Age Psychiatrist, Sheffield Health and Social Care NHS Foundation Trust.

Contact email
zoe.kwan@nhs.net

Background

Behavioural and psychological symptoms can develop in dementia and are associated with an increased risk of poorer outcomes for the patient and their care givers [1]. 7% to 25% of patients with dementia may display inappropriate sexual behaviour (ISB) [2,3]. ISB is distressing for the caregivers and also presents considerable challenges for the treating clinician.

Objectives

1. To present a case of a 79 year old male with frontal lobe dementia (following a cerebral abscess) who was referred due to ISB in a care home setting.
2. To discuss the evidence base for the management of inappropriate sexual behaviour in frontotemporal dementia.

Case report

Mr A is a 79 year old male with a background of previous depression and anxiety between the ages of 56 and 61. He contracted Legionella pneumonia and a cerebral abscess at the age of 67. An MRI head described a 3.5cm mass lesion extending into the left frontal, parietal and temporal lobes, with mass effect on the left lateral ventricle and effacement of adjacent sulci, and slight displacement of the third ventricle to the right with minimal midline shift. There was also empyema. Mr A had a craniotomy to evacuate and aspirate the abscess, and a titanium plate cranioplasty the following year. He was left with right hand weakness and some personality changes and required assistance from his wife with some activities of daily living.

Over the following years, he developed changes in his personality, such as increasing boredom, quick temper, changes in preferences, difficulty in decision making, motivation and initiation, and preferences for the routine and the concrete. A CT head scan showed progressive atrophy (see figure 1), and he was diagnosed with frontal lobe dementia.

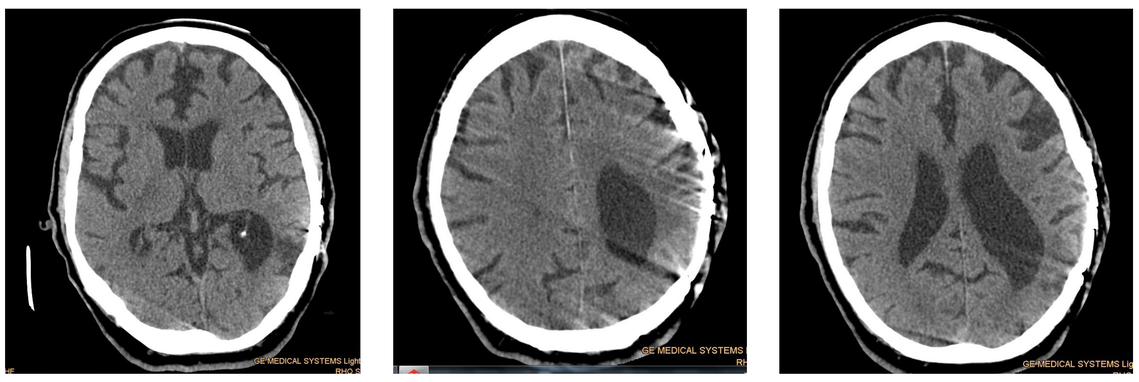

Figure 1. CT head showing from left to right: (i) a focal area of encephalomalacia in the left temporal parietal region, (ii) left parietal craniectomy, (iii) increased size of body and trigone of left lateral ventricle, indicating progressive atrophy.

He benefitted from the structured social activities in a day centre. Subsequently, his wife could not continue to care for him at home and at age 73, he was placed in permanent residential care.

He was referred to Older Adult services at age 77 due to inappropriate sexual behaviour that the care home staff were struggling to manage. He was using sexualised language towards female residents and also female care workers, and at times inviting female residents into his room and asking them to touch him. His behaviour was thought to be in relation to the progression of frontal lobe dementia. Paroxetine was started for his impulsive and inappropriate sexual behaviour. At a dose of 30mg this had a good effect for around 12 months.

Unfortunately then the sexualised behaviours recurred, and were happening on most days, such as asking staff to perform sexual acts on him, and when other residents came out of the toilet, he would at time stand at the door and proposition them. There was one incident when he stood at the entrance to another resident's room at night and masturbated in the doorway. There was no attempts of sexual assault. Non pharmacological interventions were tried but the behaviours continued, so amisulpride 50mg at night was started. This initially did not have any effect, but when reviewed 2 months later, there appeared to have been an improvement; staff reported that there had been no further incidents of sexualised behaviour.

Discussion

ISB presents in many ways such as sexual language, implied sexual acts, and overt sexual acts [1]. A differentiation has to be made between whether the act was one of intimacy- seeking or disinhibition; was the behaviour "appropriate" or "inappropriate" [4]. It is important to remember that someone with a diagnosis of dementia still has the right to express sexual feelings or sexuality. They have the same rights as anyone else in this respect [5]. However, there is a need to intervene when there are risks to the wellbeing and safeguards of the patient and also caregivers and residents. ISB can be difficult to treat, and there is limited evidence on the subject[6]. It is often better managed by non-pharmacological interventions if possible, due to patients often being less responsive to psychoactive therapies and the risks involved with using medication[4].

Non-pharmacological interventions

Non-pharmacological interventions include environmental, behavioural and educational approaches [2].

Environmental:

- Switching female staff to male staff, avoiding overstimulating media and having provisions for singles rooms in care homes so they have a safe, private space and time to masturbate for example [2, 7].
- The care home could provide provisions for conjugal visits which would result in the patient's normal sexual drive being satisfied and may reduce the frequency of ISB [2].

Behavioural:

- Redirection by verbal or physical means [1, 2, 8].
- Gently identifying to the patient if the behaviour is inappropriate or reorientation if the patient is confused and misinterpreting the situation [8, 9].
- If the patient was masturbating in public, exposing or fondling genitals, distraction by manual activities might help [2, 8].

Educational:

- This involves sex education programmes for not only the carers or nursing staff but also the family. The emphasis should be on the need for normal sexual expression while preventing inappropriate behaviours [2].
- There is a clear need for more training and education however, there little is published on the development, implementation or evaluation of such tools [10]. The Sexuality Assessment Tool (SexAT) was developed to help institutions identify and improve the environment and practice in order to support older adult's sexual expression [10].

Pharmacological interventions

If non-pharmacological interventions are not effective, pharmacological interventions could be considered. To date, there are no randomised control trials or trials comparing different pharmacological agents [2, 3, 6]. The current evidence has been developed from case series and case reports [2, 3, 6]. There are no drugs licensed in the UK for treatment of ISB. The principle of treating with the lowest most effective dose in the elderly should be implemented when it came to using pharmacological strategies. Table 1 lists the different drugs which have shown efficacy in treating ISB. The variety of drug classes illustrate the non specific nature of drug therapy.

Class of drugs	Drugs
Serotonergic Agents	Selective serotonin reuptake inhibitors Trazodone Tricyclic antidepressants
Antipsychotics	Atypical antipsychotics Haloperidol
Mood stabilisers/ anti-epileptics	Carbamazepine Gabapentin
Hormonal Agents	Oestrogens Gonadotrophin-releasing hormone analogues Anti-androgens: medroxyprogesterone acetate (MPA), cyproterone acetate (CPA), finasteride
Cholinesterase inhibitors	Rivastigmine Donepezil
Beta blockers	Pindolol
H_2 receptor blockers	Cimetidine

Table 1. Pharmacological treatments for inappropriate sexual behaviour in dementia [1, 2, 3, 5]

Conclusions

- Managing patients with inappropriate sexual behaviour should involve a multidisciplinary holistic approach which should include clinicians, carers, nursing staff as well as family members.
- The evidence suggests using non-pharmacological approaches as first line before considering pharmacological interventions.
- However, there is a need for further research to develop robust non-pharmacological and pharmacological interventions in the treatment of ISB.

References

1. Joller P, Gupta N, Seitz DP, Frank C, Gibson M, Gill SS. Approach to inappropriate sexual behaviour in people with dementia. *Can Fam Physician*. 2013;59(3):255–260.
2. De Giorgi R, Series H. Treatment of Inappropriate Sexual Behavior in Dementia. *Curr Treat Options Neurol*. 2016;18(9):41. Available from: doi:10.1007/s11940-016-0425-2
3. Srinivasan S, Weinberg AD. Pharmacologic treatment of sexual inappropriateness in long-term care residents with dementia. *Annals of Long-Term Care*. 2006; 14(10):20-28.
4. Cipriani G, Ulivi M, Danti S, Lucetti C, Nuti A. Sexual disinhibition and dementia. Psychogeriatrics. *The Official Journal of the Japanese Psychogeriatric Society*. 2016; 16(2): 145-153. Available from: doi.org/10.1111/psyg.12143
5. Series H, Degano P. Hypersexuality in dementia. *Advances in Psychiatric Treatment*. 2005; 11: 424-431.
6. Tucker I. Management of inappropriate sexual behaviours in dementia: a literature review. *International Psychogeriatrics*. 2010; 22(5): 683-692. Available from: doi.org/10.1017/S1041610210000189.
7. Care Quality Commission. *Relationships and sexuality in adult social care services: Guidance for CQC inspection staff and registered adult social care providers.* Available from: https://www.cqc.org.uk/sites/default/files/20190221-Relationships-and-sexuality-in-social-care-PUBLICATION.pdf.
8. Alagiakrishnan K, Lim D, Brahim A, Wong A, Wood A, Senthilselvan A, Chimich WT, Kagan L. Sexually inappropriate behaviour in demented elderly people. *Postgrad Med J.* 2005; 81:463–466. Available from: doi: 10.1136/pgmj.2004.028043
9. Social Care Institute for Excellence. *The expression of sexuality in dementia*. 2015. Available from: https://www.scie.org.uk/dementia/living-with-dementia/difficult-situations/sexual-expression.asp.
10. Thornton H, Offord R. Non-pharmacological management of sexual behaviours that challenge in dementia. *Reviews in Clinical Gerontology*. 2015; 25: 194-201. Available from: doi:10.1017/S0959259815000167.