



Dementia and diabetes

Jill Hill

Co-chair TREND-UK



Disclosures

• I have received payment for articles, presentations and involvement on advisory boards for all the major pharmaceutical companies who support diabetes



What will this session cover?

- Some facts about these two common conditions
- The issues for people who have diabetes and develop dementia
- The issues for people with dementia who develop diabetes
- Some practical tips when supporting people with both conditions



Diabetes and Dementia – Facts

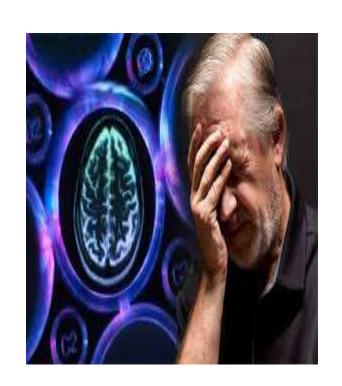
- 3.7 million with diabetes (Diabetes UK 2018)
- 850,000 with dementia (Dementia UK 2017)
- The future:
- 5 million with diabetes by 2025 (Diabetes UK 2018)
- 1 million with dementia by 2025,
 2 million by 2050 (Prince et al, 2014)



Dementia



- Progressive irreversible condition of the brain resulting in widespread impairment of mental function.
- Memory loss, problems with reasoning and communication, changes in personality, decreasing ability to carry out daily activities of living.
- Progression leads to restlessness, wandering, eating problems, incontinence, delusions, mobility difficulties, and increasing dependence on others (NICE 2018)
- 1 in 14 people aged >65, 1 in 6 aged > 80.
- Women > men (Alzheimers Society 2017)





Diabetes and dementia

- Type 2 diabetes: 60% increased risk for all-cause dementia (Gudala et al 2013)
- People with Alzheimers have increased risk of developing type 2 diabetes (35% vs 18%) (van de Vorst et al, 2016)
- Cognitive decline is doubled in older people with type 2 diabetes
- Type 2 is a risk factor for CVD and cerebro-vascular disease
- "Healthy heart: healthy brain" (Sabia S et al, 2019)
- Insulin resistance reducing insulin entering the brain (Cholderton et al 2016)



Issues for people with diabetes who develop dementia



Forgetting to take medication, or forgetting they have taken it and double-dosing



Forgetting how to use BGM meter and insulin device



Forgetting to eat, or forgetting they have already eaten and eating again



Inability to make decisions (e.g. Interpreting BG readings to treat hypoglycaemia or adjust insulin dose)



Loss of so much including intimate knowledge of diabetes

Issues for people with dementia who develop diabetes





Delayed diagnosis of diabetes if unable to recognise or communicate symptoms



Developing incontinence with hyperglycaemia-induced polyuria if they cannot find their way to the toilet



Increased risk of falls with increased trips to the toilet



Increased confusion with hyperglycaemia, tiredness and dehydration



Inability to verbalise thirst, pain



Distress if diet is changed significantly, or they need injections and BGM and do not understand why

Safety





Agree appropriate target levels for blood glucose and HbA1c, to avoid the risk of acute metabolic complications.



Reduce the risk of hypoglycaemia by avoiding the use of insulin, sulphonylureas and glitinides if possible



Simplify medication regimens (e.g. daily long-acting basal analogue insulin that can be given by a community nurse at a time that fits in with other care providers)



Train and support carers/partners to give insulin, or supervise the individual to give safely



Ensure insulin is stored in a locked box or similar if the individual is still able to self-inject under supervision but is forgetful



Train carers to recognise hypoglycaemia and to treat promptly and appropriately. Ensure hypo treatments are always accessible.



Recognise problems with nutrition- e.g. swallowing, recognising cutlery

Cognitive ability



- Recognise what the person is still able to do (e.g. use a blood glucose meter, give his or her own insulin injections after the dose has been checked) and support them to continue with this while they are still able.
- Review self-care ability regularly
- Simplify medication regimes and tablet load, preferably to once daily. Ask the pharmacist about tools to support self-medication such as blister packs and timed 'dosset' boxes (NICE, 2017). However, these are not helpful in people who have no awareness of time or day



Personal history

- How long has he or she been living with diabetes?
- The individual may have long-established routines and skills which they remember clearly, even though their memory for recent events is poor.
- Familiar routines should be maintained where possible, to reduce distress and frustration.



Personality

- Changes in usual behaviour may indicate hypoglycaemia or hyperglycaemia. Symptoms of diabetes or the complications of diabetes may be ignored and assumed as personality traits. Loud aggression may be a symptom of low blood glucose for example, in people taking insulin or sulphonylureas, or a sign the person is in pain from diabetes damage to nerves.
- Being aware of and responding to preferences for certain routines or foods can improve quality of life



Environment

- Meals should be provided in a calm and distraction free environment
- Encourage a nourishing diet that provides sufficient calories to maintain ideal weight and fits the person's usual meal pattern. Smaller portions of items in a familiar diet may be easier to achieve than completely removing items or making big changes to eating patterns
- Clinic appointments, and interventions such as daily injections should be arranged earlier in the day. Confusion may be worse later in the day when the individual is tired
- "Sundowning" (Dementia UK, 2017)



Tips for better communication (adapted from Dementia UK 2017)

Stop what you are doing and focus on the person Say their name when talking to them

Maintain appropriate eye contact

Speak clearly and slowly, using short sentences.

Pictures and hand gestures can be helpful in getting messages across (miming drinking a cup of water or giving an injection).

Give the individual time to reply to questions so they do not feel rushed.

Distractions like background should be reduced.

Use simple straight-forward language

Avoid using too many open questions at once

It may be easier for them to take in information, answer questions and make decisions earlier in the day.



Diabetes and dementia: Guidance on practical management



- Signs and symptoms
- Making the diagnosis
- Diabetes medications
- Hypoglycaemia
- Support plans
- Nutrition
- Useful resources
- Competency framework



Living with Diabetes and Dementia





- www.trend-uk.org
- www.alzheimers.org.uk
- www.dementiauk.org

Useful resources

- NICE guidelines/quality standards:
 - QS1: Dementia quality standards (NICE, 2010)
 - QS30: Supporting people to live well with dementia (NICE, 2013a)
 - QS50: Mental well-being of older people in care homes

References



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