Deprivation of liberty to safeguard against recurrent ketoacidosis

Dr A Aslam
MRCP, MRCGP, Clinical Research Fellow

Professor SM Rajbhandari
FRCP, Consultant Diabetologist and Honorary Clinical Professor

1Department of Diabetes, Lancashire Teaching Hospital, Chorley, UK
2University of Central Lancashire, Preston, UK

Correspondence to:
Dr Amir Aslam, Clinical Research Fellow, Department of Diabetes, Chorley & South Ribble Hospital, Preston Road, Chorley PR7 1PP, UK; email: Amir.Aslam@lthtr.nhs.uk

Received: 11 September 2012
Accepted in revised form: 29 November 2012

Case report

Deprivation of liberty to safeguard against recurrent ketoacidosis

Abstract
Advances in medical treatment have resulted in prolonged survival of people with diabetes, with multiple complications. Vascular dementia is one of these and is increasingly seen due to a reduction in mortality from cardiovascular causes. People suffering from dementia are often not capable of weighing up the advantages and disadvantages of proposed treatment in order to give an informed decision. In most cases, this incapacity does not cause problems as patients and their carers agree with the recommendation made by their health care professionals. However, we encountered a challenging case where we had to apply for deprivation of liberty safeguards (DoLS) to treat in the patient’s best interests.

We report the case of a patient with vascular dementia who had repeated admissions with life-threatening diabetic ketoacidosis (DKA) as she refused to comply with the insulin treatment because of her lack of insight regarding her diabetes care. In order to prevent harm to her, an application was successfully made for DoLS. This allowed treatment with once-daily, long-acting analogue insulin under supervision even against her wishes. This prevented further admission to hospital with DKA.

DoLS was introduced in the UK in April 2009 to safeguard some of the most vulnerable people in our society for their own safety. People with type 1 diabetes are increasingly surviving longer and may suffer from dementia. The majority will manage with some help from family or health care worker, but in a small proportion DoLS may be needed, as in our case, to prevent recurrent life-threatening complications. Copyright © 2013 John Wiley & Sons.

Practical Diabetes 2013; 30(2): 60–62

Key words
DoLS; dementia; type 1 diabetes; recurrent DKA; deprivation of liberty safeguards

Case history
A 66-year-old woman with childhood onset type 1 diabetes, complicated by blindness due to retinopathy and early vascular dementia following cerebrovascular accident, had challenging behaviour towards health care professionals. She lived alone with family support and was independently mobile. She managed her own blood glucose testing and insulin injections, but had an inappropriately fixed idea about the dose and type of insulin. She was admitted to the hospital six times with diabetic ketoacidosis (DKA) in one year. On one occasion when admitted due to DKA, she needed intensive treatment in the critical care unit.

After one of her admissions for DKA treatment she was discharged to a care home for all insulin to be administered by staff. In the care home, she became verbally abusive and screamed, wanting to go home. She was assessed by a psychiatrist and it was found that she had some degree of dementia, with no insight regarding diabetes, but was deemed to have capacity to make her own decision about going home. She was therefore allowed home, and it took only a few days before she was readmitted with DKA.

On questioning, she was found to have no capacity to understand about the life-threatening consequences of not taking insulin. In her best interests, she had to be deprived of her liberty and was started on once-daily treatment with long-acting insulin against her wishes. In view of this, the treating team applied to the local primary care trust (PCT) for authorisation for deprivation of liberty safeguards (DoLS) assessment. She had the...
Deprivation of liberty safeguards: application process

The managing authority (hospital or care home) has to apply to the supervisory body (PCT, local authority or Welsh minister) for the assessment to get lawful authorisation to deprive liberty. A standard authorisation can be applied for when the managing authority feels that it is highly likely that the patient’s liberty will be deprived in the next 28 days. However, in circumstances where there is no time to wait for standard authorisation, the managing authority can issue urgent authorisation themselves, which lasts for seven days, and at the same time apply for standard authorisation. This should be assessed within the timeframe of urgent authorisation. Standard authorisation assessment must be completed by the supervisory body within 21 days of application, and urgent authorisation assessment should be completed before its expiry. The supervisory body only authorises deprivation of liberty when they are satisfied with the following:

- The person should be at least 18 years of age or older.
- The person should have a mental disorder – including dementia, learning disability, or certain neurological brain disorders (e.g. as a result of brain injury).
- The person lacks capacity to decide treatment or residence.
- It should be in the best interests of the person to deprive liberty in order to prevent the likelihood and seriousness of the harm. The best interests assessor should seek the views of those interested in the care and welfare of the person such as family carers or close relatives; if no-one can represent on the patient’s behalf, then the managing authority should apply for an Independent Mental Capacity Advocate to represent and provide help about continued use of safeguards.

- The person is not eligible for deprivation of liberty authorisation if they need treatment for mental health for which they should be detained under the Mental Health Act 1983.
- There is no existing authority for decision making for that person which would conflict with deprivation of liberty authorisation such as an advanced directive made by the person for refusal of particular treatment.

If all of the above assessments support the authorisation of DoLS, then the best interests assessor recommends authorisation to the person’s appointed representative. If there is any doubt or contradiction regarding the decisions, there is the right to apply for Court of Protection which has the power to terminate authorisation or vary conditions. If there is no conflict, the managing authority implements DoLS. The maximum duration of authorisation is 12 months. Replication by the managing authority is necessary before the authorisation expires if it is still deemed to be necessary.

Discussion

People with diabetes have a 2.5 times higher risk of developing dementia. In one prospective study of 1262 patients followed up for 4.3 years, the adjusted relative risk of stroke-associated dementia in patients with diabetes was 3.4 times higher. Various neurophysiological and structural changes have been described in subjects with type 1 diabetes; however, there is a paucity of literature regarding an association between type 1 diabetes and dementia. The Rotterdam study on 6330 participants found a 3.2 times higher prevalence of dementia in diabetes subjects treated with insulin. This problem is likely to increase as the survival of people with type 1 diabetes is improving. Patients with dementia often fail to remember to take their prescribed medications. One of the consequences of missing insulin in type 1 diabetes could be life-threatening DKA. This can be prevented by special reminders, supervision by...
family members or administration by health care professionals. Most of the time, dementia patients and their families concur with the treatment plan; however, if a situation arises when either the patient or their family disagree, the treating team needs to consider applying DoLS in order to prevent harm in the best interests of the patient. Therefore, health care professionals managing type 1 diabetes need to be aware of DoLS and related legal issues.

We applied for DoLS in our patient as she was neither taking her insulin nor allowing anyone to give it to her, which resulted in multiple episodes of life-threatening DKA. Due to vascular dementia, she did not have any insight into the dangers of not taking insulin. Both the treating team and her family agreed on DoLS, and there were no advanced directives. Consequently, DoLS was authorised for the use of long-acting insulin once a day along with daily blood glucose monitoring, which prevented further admissions with diabetic ketoacidosis.

Declaration of interests
There are no conflicts of interest declared.

References

Key points
- Patients with type 1 diabetes are increasingly surviving longer and developing complications such as vascular dementia
- Vascular dementia makes it difficult for the patient to understand the need for insulin to prevent diabetic ketoacidosis
- Deprivation of liberty safeguards (DoLS) can be applied for from the local authority in order to ensure these patients take insulin under supervision, thus preventing diabetic ketoacidosis

Diary
- 5th International Conference on Advances in Diabetes and Insulin Therapy
  11–14 April 2013
  Sofia, Bulgaria
  Email: info@adit-conf.org
  Website: http://adit-conf.org

- PsychoSocial Aspects of Diabetes (PSAD) Spring Meeting
  12–14 April 2013
  Croatia
  Website: www.psad-easd.eu

- Association of British Clinical Diabetologists (ABCD) Spring Meeting
  18–19 April 2013
  St John’s Hotel, Solihull, West Midlands, UK
  Email: else@redhotions.com
  Website: www.diabetologists.org.uk

- 5th International Congress on Prediabetes and the Metabolic Syndrome
  18–20 April 2013
  Vienna, Austria
  Email: tessa.kenes@kennes.com
  Website: www2.kenes.com/prediabetes/

- British Renal Society Conference
  14–16 May 2013
  Manchester, UK
  Email: brs@britishrenal.org
  Website: www.britishrenal.org

- Diabetic Foot and Lower Limb Care in the 21st Century: What every patient has the right to expect
  18 May 2013
  Weston Education Centre, King’s College London
  Email: g-tr.diabeticfootcomplications@nhs.net or diabeticfootcomplications@yahoo.com

- The Royal College of Ophthalmologists Annual Congress
  21–23 May 2013
  Arena and Convention Centre, Liverpool, UK
  Email: contact@rcophth.ac.uk
  Website: www.rcophth.ac.uk

- Hot Topics in Obesity
  23 May 2013
  Postgraduate Medical Centre, Derriford Hospital, Plymouth, UK
  Email: k.godley-macavoy@nhs.net

- ADA 73rd Scientific Sessions
  21–25 June 2013
  Chicago, USA
  Website: www.diabetes.org

- Heart UK 27th Annual Conference
  5–7 July 2013
  UWE Exhibition and Conference Centre, Bristol, UK
  Website: www.heart.org.uk

- Foundation of European Nurses in Diabetes Annual Conference
  20–21 September 2013
  Barcelona, Spain
  Website: www.fend.org

- EASD Annual Meeting
  23–27 September 2013
  Barcelona, Spain
  Email: secretariat@easd.org
  Website: www.easd.org

- International Society for Paediatric and Adolescent Diabetes Annual Meeting
  16–19 October 2013
  Gothenburg, Sweden
  Email: secretariat@ispad.org
  Website: www.ispad.org