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Diabetes management and palliative care: Example of Turkey

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Abstract

Palliative care is a multidisciplinary approach to achieving the best quality of life in order to prevent or relieve the symptoms that may occur in people with serious illnesses. Diabetes affects about 171 million people worldwide. Current United Kingdom prevalence of diabetes in people over 65 is 10%. In 2005 about 10 million people were diagnosed with cancer. For this reason, a limited number of sources have been used in the writing of this compilation and it is thought that this literature which is missing in our country will contribute to this literature.

Introduction

Palliative care is a multidisciplinary approach to achieving the best quality of life in order to prevent or relieve the symptoms that may occur in people with serious illnesses. It is not only the maintenance done during the last period of life, but regardless of the disease stage, medical care is a form of treatment that must be integrated both during curative and lifespan during prolonged care. The primary role of palliative care is to relieve all physical and emotional symptoms, primarily pain [1,2]. When palliative care is initiated early in serious illness, it provides a more meaningful favor in terms of clinical and quality of life [3].

Palliative care includes those investigations needed to better understand and manage distressing clinical complications. Improving the outlook toward life of patients and their families facing life-threatening illness through prevention and relief of suffering defines palliative care. In palliative care, early diagnosis in the management of chronic diseases, pain management, symptom management, physical, psychosocial and psychological evaluation are the forefront [4,5]. Disease management in palliative care provides patients with less pain and lighter complications [6].

Diabetes affects about 171 million people worldwide. Research has shown that 10% of people over 65 in the UK are diabetic. According to 2005 data, it is estimated that 10 million of these people will be cancer patients in the UK [7]. When we look at the year 2017, this data is unfortunately confirmed [7]. There are no reliable statistics about the prevalence of diabetes among terminally ill cancer patients, but it is probable that the prevalence of diabetes is higher than in the elderly population. The incidence of diabetes in patients with cancer is postulated to be higher when compared to the general population [2]. Regular and frequent glycemic control in the management of diabetic patients in palliative care, to protect patients from the complications of diabetes, should prevent progress even if there is a previous complication.

In diabetic individuals with multiple chronic illnesses, the causes of diabetes development include advanced stages of cancer

(i.e., pancreatitis), obesity, cancer-induced metabolic changes, corticosteroids and diuretic use. [2]. Medical advances in disease management have resulted in people living longer, often with multiple morbidities, eventually reaching a stage at which palliative management is paramount. In palliative care, diabetes management aims to improve disease management and quality of life for people who have not responded to treatment and who have advanced disease and their families [3,4].

Regular blood sugar follow-up, diet, glycemic control and treatment are important elements in the management of diabetes. Despite the fact that there are similar evidence-based guidelines in the world of diabetes management in the world, there is insufficient resources for the management of diabetic patients in palliative care.

The aim of this article is to highlight the importance of diabetic patient management in palliative care units.

Glycemic control and paliative care

It is important for blood glucose monitoring to continue until the final stages of palliative care. The aim of glycemic control in patients at the end of life changes from preventing and managing long-term complications of diabetes to preserving quality of life. Terminally ill patients often have multiple factors affecting their glycemic control (Table 1). Glucose-lowering therapy should be tailored to minimize the risks of hypoglycemia and hyperglycemic states and symptoms [8,9].

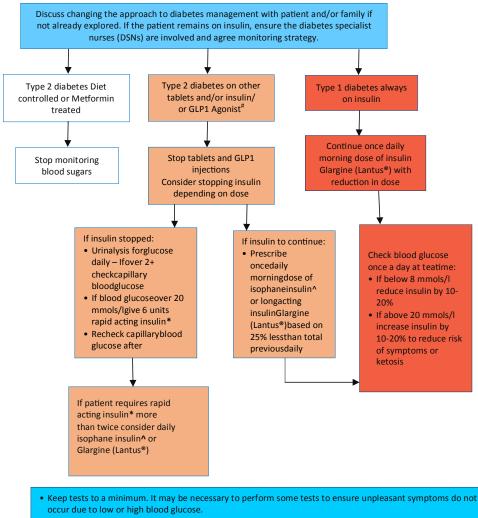
Hyperglycemia can worsen pain, confusion, thirst, cognition, confusion and incontinence. Blood glucose levels >15 mmol/L may cause polyuria and increase risks of infection. Hypoglycemia can also

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- It is difficult to identify symptoms due to "hypo" or hyperglycaemia in a dying patient.
- If symptoms are observed it could be due to abnormal blood glucose levels
- Test urine or blood for glucose if the patient is symptomatic.
- Observe for symptoms in previously insulin treated patient where insulin has been discontinued.

(Liraglutide), Lyxumia (Lixisenatide); *Humalog/Novorapid®/Apidra; ^Humulin I/Insulatard/Insuman Basal.

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Table 1. Factors affecting glycaemic control in patients with diabetes at end of life.

Figure 1. Algorithm diabetes care management strategy and paliative care [Key: #Byetta (Exenatide)/Victoza,

Stress response to severe or sustained illness	
Organ failure	
Malignancy	
Chemotherapy	
Use of steroids	
Frequent infections	
Poor appetite/smaller meals	
Poor nutrition	
Cachexia	
Dehydration	
Difficulty taking medications (eg difficulty swallowing, nausea, stress)	
Weight loss	

cause discomfort, confusion and impaired cognitive function. DKA can mimic terminal illness. If not recognised and treated, it can severely impair quality and even duration of life [8-11].

Medical treatment in diabetes in paliative care unit

Careful monitoring and control of blood glucose levels via diet and glucose-lowering medicines (insulin and/or oral agents) are essential components of glycemic control [12]. In this regard, diabetes management in palliative care can be summarized as in Figure 1 [13].

General caution of metformin use in dehydrated patients, and patients with severe liver and renal impairment. Particular caution required if patient on sulphonylureas because of danger of hypoglycemia. If small meals are being taken, long-acting sulphonylurea preparations (eg. glibenclamide, glimepiride) should be avoided. Then, oral hypoglycemic and observe for symptoms of altered blood sugars should be reduced or stopped [3,14].

If the patient's conscious is open and blood glucose is less than 10 mmol/L, the insülin is stopped or is reduced long acting/intermediate acting insulin dose by ½. If the patient is unconscious and in dying phase, the insulin is stopped [14].

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In the clearly imminently dying patient, where the burden of injections and monitoring will likely outweigh any benefit, insulin can be discontinued after discussion with the patient (if possible) and the family [14].

Conclusion

In our country, palliative care is a new approach and continues with an effective team approach at certain centers. Palliative care service is a service process carried out with effective cooperation. Communication, coordination, symptom control, maintenance continuity, learning activities, caregiver support and end-of-life care constitute the seven gold standards.

In our country, which focuses on palliative care of cancer patients, there are publications on palliative care follow-up of a limited number of diabetic patients. The management of diabetic patients in palliative care is mostly shaped by World Health Organization reports.

For this reason, a limited number of sources have been used in the writing of this compilation and it is thought that this literature which is missing in our country will contribute to this literature.

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