Module III-7

Long-term complications

Overview

While the underlying pathophysiology and management of both of the major forms of diabetes differ, a common feature is the development of long-term micro- and macrovascular complications, such as retinopathy, nephropathy, macrovascular disease and peripheral and autonomic neuropathy. These complications are associated with increased morbidity and mortality.

The predictors for the development of microvascular complications are duration of diabetes and poor metabolic control. However, the progression of these complications can be reduced by prompt and intensive treatment. Therefore, strategies must be in place for their early detection.

As type 2 diabetes can be present for many years before diagnosis and up to 30% of people already have a complication at diagnosis, the assessment of complications should begin at diagnosis and annually thereafter. Adults with type 1 diabetes should be assessed within 5 years of diagnosis and annually thereafter.

Goals

- To develop a comprehensive understanding of the pathophysiology of micro- and macrovascular complications
- To provide participants with an understanding of their role in recommending and advocating for early screening and prompt treatment, and in some cases performing screening for complications
- To discuss the implications of monitoring and treating long-term complications
- To understand the psychological consequences of long-term complications for the individual and the family members
- To discuss the necessity of being honest and adopting a positive approach to the prevention and management of complications, and of not using scare tactics and threatening messages

Module III-7f

Oral health and diabetes

Overview	Oral health is commonly overlooked in the management of diabetes. However, it is important in order to maintain an optimal level of health for people with diabetes. Oral infections may compromise glycaemic control; conversely, hyperglycaemia may lead to increased dental caries and/or infections to the teeth and the gums. Dry mouth as a consequence of diabetes medications may also lead to discomfort and problems, especially in people who wear dentures.
Goals	• To understand the increased risk of oral disease and gum disease in people with diabetes • To understand the importance of counselling people with diabetes on oral hygiene techniques and practices
Objectives	After completing this module the participant will be able to: • Discuss the increased risk of dental caries in people with diabetes • Define xerostomia, why it occurs, and its consequences • Discuss the increased risk of fungal infections of the mouth and some of the predisposing factors • Discuss lichen planus and its consequences • Discuss gum diseases, such as gingivitis and periodontitis, their causes, treatment and consequences
Teaching strategy	Lecture and discussion
Suggested time	30 minutes
Who should teach this module	Diabetes educator

Evaluation of learning	Question and answer Case studies
References	American Dental Association. *Diabetes and your oral health*. (www.ada.org/public/topics/diabetes.asp) American Diabetes Association. *Oral health and oral hygiene*. (www.diabetes.org/type-1-diabetes/mouth-care.jsp) Cherry-Peppers G, Ship JA. Oral health in patients with type 2 diabetes and impaired glucose tolerance. *Diabetes Care* 1993; 16: 638-41. D'Aiuto F, Massi-Benedetti M. Oral health in people with diabetes: why should we care? *Diabetes Voice* 2008; 53: 33-6. Mayo Foundation for Medical education and Research. *Oral health: a window to your overall health*. (www.mayoclinic.com/health/dental/DE00001) Ship JA. Diabetes and oral health: an overview. J *Am Dent Assoc* 2003; 134 Spec No: 4s-10s.