MEDIBEATS
The Medical Bulletin

In Critical Care

1. Hyperglycemia is an independent risk factor for macro-vascular complications. People with diabetes, particularly those with T2D, often have comorbidities such as hypertension, dyslipidemia, and central adiposity that also contribute to increasing the risk of macro-vascular complications.

2. Addressing modifiable ASCVD risk factors in people with diabetes through lifestyle modifications (dietary habits, physical activity, and smoking cessation), weight loss, and appropriate medication use has been shown to significantly reduce the risk of cardiovascular complications.

3. Aggressively treating elevated blood pressure to recommended goals using ACE inhibitors or ARBs (but not both), di-hydro-pyridine calcium channel blockers, and thiazide diuretics, alone or in combination, can significantly reduce the risk of macro-vascular complications. Similarly, the routine use of lipid-lowering therapy, especially moderate- to high-potency statins, has been shown to reduce the development and progression of ASCVD and prevent cardiovascular (CV) events.

4. Nonalcoholic fatty liver disease (NAFLD) has emerged as the most common cause of chronic liver disease, including advanced fibrosis, and is prominent in people with T2`1D.

5. Currently, lifestyle modifications to promote weight loss are the cornerstone in NAFLD management, with bariatric procedures in appropriate individuals and certain medications also having benefit.

6. Dietary changes designed to achieve and maintain at least 5% weight loss are recommended for overweight or obese people with diabetes. Weight-loss interventions should focus on calorie restriction to achieve a 500- to 750-kcal/day energy deficit.

7. There is no ideal calorie distribution among carbohydrates, proteins, and fats; however, carbohydrate counting is recommended for people with T2D to reduce post-meal glucose excursions. Common goals are ≤45 to 60 g of carbohydrates per meal (or no more than 1/4 of the plate as starch or grain) and no more than 15 g per snack. In T1D, carbohydrate counting is used to determine mealtime insulin doses.

8. Physical activity and exercise are integral to the prevention and management of T2D. Adults with pre-diabetes or diabetes should engage in 150 minutes/week of moderate to vigorous physical activity with no more than 2 consecutive days without physical activity.

9. A combination of aerobic and resistance exercise is optimal for maximizing the benefits of exercise therapy in diabetes and can help minimize glucose variability and attenuate hypoglycemia risk.

10. There are physical, pathophysiological, socioeconomic, and complication-related barriers to physical activity in people with diabetes. Identification of these barriers and individualization of exercise regimens based on comorbidities and diabetes complications are a key to maximizing the benefits and reducing the risks of exercise in patients with diabetes.

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