

## **Diabetes Update**

By Jayne Lehmann

*Current estimates indicate that nearly eight per cent of Australians have diabetes. Another 16 per cent have impaired glucose tolerance, which increases their risk of getting diabetes in the future. In this article Jayne Lehmann explains the different types of diabetes and how massage can alleviate the symptoms of this disease.*

Diabetes occurs when a person can no longer adequately process glucose consumed by the consumption of carbohydrates, the major energy source for the body. Glucose levels rise, creating the symptoms of feeling thirsty, tired, lethargic, unexplained weight loss, urinating more often, blurred vision and persistent infections e.g. thrush and boils.

People with diabetes often also have a clustering of health problems that combine to create long term health problems: central obesity (abdominal fatness), impaired glucose tolerance, high blood pressure and lipid abnormalities. This magnifies their potential risk for future health problems such as heart attack, stroke, vision loss, kidney disease, impotence and foot and leg amputations.

### **Types of Diabetes**

#### **Type 1**

Type 1 Diabetes was previously called Insulin Dependent Diabetes Mellitus or Juvenile Onset Diabetes. This affects ten to 15 per cent of people with diabetes. The symptoms of the condition come on quickly and patients require insulin injections from diagnosis to replace the insulin their body can no longer produce. Current research indicates an autoimmune response may occur, triggering the destruction of the insulin producing pancreatic beta cells. They are also encouraged to adopt the lifestyle treatments outlined below.

#### **Type 2**

Type 2 Diabetes was previously called Non-Insulin Dependent Diabetes Mellitus or Mature Onset Diabetes. This affects 85 to ninety per cent of people with diabetes. This type of diabetes is most common in people over forty years but increasingly we are seeing it in children as young as six, due to the childhood obesity problems. These people either have reduced levels of insulin, or the insulin resistance, where the body is unable to use insulin properly. The latter is more likely to occur in individuals who are overweight with central obesity.

### **Lifestyle Treatment**

#### **Diet**

A healthy diet low in fat and sugar, moderate protein and a spread of complex carbohydrate over the day helps people with diabetes maintain a Body Mass Index of 25 or less. People are encouraged to eat a variety of foods to ensure they consume adequate vitamins and minerals.

#### **Exercise**

Thirty minutes of moderate intensity exercise most days of the week is the aim, to encourage weight loss or maintenance, and improve cardiovascular fitness. Exercise also helps reduce stress.

#### **Stress Management**

Increasingly, stress management is included as a lifestyle approach to diabetes. Stress releases hormones that increase the blood glucose level and active stress management controls its effect on the blood glucose level.

#### **Medication**

People with Type 1 Diabetes need insulin injections from diagnosis for the rest of their life.

People with Type 2 Diabetes commence on a health diet, do regular exercise and if these measures do not work, a tablet will be introduced. Many people with this type of diabetes will then go on to require stronger diabetes medication and many eventually need insulin injections.

**Is there a role for massage in diabetes care?**

Increasingly it would appear so. Massage has a positive impact on stress management, the benefits of which are outlined above.

Massage helps improve muscle tone and flexibility, which in turn can increase a person's ability to exercise and increase their general activity. Regular massage can play a role in addressing any underlying issues that may be causing pain in some individuals. If the outcome of massage is a reduction in pain, then this will increase the ability of a person to do other forms of regular exercise.

**Precautions**

As a part of your initial assessment, it is always a good idea to find out which other health care professionals the person with diabetes is consulting. Encourage the client to tell the other health care providers in their team that they are having regular massages, so this information can be taken into account in the care and education being provided.

People with diabetes who are on the sulphonylurea class of diabetes tablets and those who are on insulin are at risk of hypoglycaemia (hypo), or a low blood glucose level. It is thought that massage may increase the possibility of a hypo. Therefore encourage clients to discuss the identification, treatment and prevention of hypoglycaemia with his/her general practitioner or Credentialed Diabetes Educator. They should also increase their blood glucose monitoring in order to assess the impact it has on their glucose levels.

It would also be prudent to avoid massaging the site where the person has injected their insulin as this may affect the absorption of insulin.

People with diabetes are at an increased risk of a variety of health problems. Massage therapists are encouraged to increase their knowledge and understanding of diabetes in order to provide a safe massage therapy service to these individuals.

*Jayne Lehmann BN(Ed) DipAppSc(Nsg) FRCNA RN CDE is as Diabetes Nurse Specialist with EdHealth Australia.*