

EFFECTS OF MASSAGE ON DIABETES

Shona Stewart RMT OSM DIR GHV(Aroma) MGCP SMT0

Diabetes is the most common of the serious diseases involved with metabolism. Our metabolic rate is the rate at which our body uses energy.

Diabetes is a chronic disorder of the metabolism of protein, fat and carbohydrate, characterised by fasting elevations of blood sugar levels. This disease greatly increases the risk of kidney disease, loss of sight, coronary artery disease, strokes and loss of nerve function.

There are various categories of diabetes:

- ◆ **Insulin-dependent diabetes mellitus**
This usually occurs in the very young and means that there has been a complete destruction of the beta-cells of the pancreas which is the gland in the body responsible for manufacturing insulin.
- ◆ **Non-insulin dependent**
This usually occurs in adults and is more likely to occur in obese individuals and if they also smoke, the risk is greatly increased.
- ◆ **Secondary diabetes**
This is associated with certain conditions such as hormonal problems and disease of the pancreas, particularly pancreatitis. Also some drug therapies, steroids being one, increase the risk. There are also some forms of diabetes of a genetic base. Sometimes the onset of a childhood illness such as measles, mumps or chickenpox in an adult, particularly where the temperature becomes very raised, can trigger the onset of diabetes.
- ◆ **Gestational diabetes**
This condition occurs during pregnancy and is due to the glucose intolerance of some women at this time. Women who suffer from this condition usually have very large babies, which have to be delivered by Caesarean operation, and there is an increased risk of the mother developing diabetes later in life.

The prevalence of diabetes is rising and is now the seventh leading cause of death in the western world. It is estimated that the number of cases of diabetes will double every fifteen years.

Diabetes is uncommon in cultures consuming a more 'primitive diet', but if these primitive cultures have the opportunity to change their lifestyles to a more 'western' one, their rate of diabetes increases, eventually reaching the same proportions as seen in western societies.

Obese individuals need to produce higher insulin levels to cope with the increase in fats and carbohydrates, therefore placing a considerable strain on the pancreas. Constant over-work of this gland leads eventually to pancreatic exhaustion.

It is the beta cells of the pancreas that are responsible for producing and secreting insulin. There has been some research into possible 'injury' of the pancreas due to 'free radicals', viral infection and auto immune reactions.

Diabetics are prone to occlusion of particularly the smaller arterioles of the feet, and if their diabetes has been poorly controlled they are more likely to suffer from this. Since they are also liable to skin infections and may have reduced sensation, the combination often leads to ulceration so diabetics have to regard any slight injury to their feet as being serious in order to help prevent the risk of ulceration. Due to the fact that diabetics have very poor healing generally, an ulceration in the extremity could take months to heal.

Intermittent Claudication

This unpleasant condition is experienced by many diabetics – an aching cramp-like pain occurs in the muscles of the calf after walking a short distance. The cause is severe narrowing of the femoral or popliteal arteries. It usually occurs in men and is prevalent in atherosclerosis.

The word 'claudication' means to limp (the Roman emperor Claudius derived his name from this characteristic).

Early symptoms are cramps in the calves usually at night, followed by coldness, poor colour in the lower limb with a dryness and often flakiness of the skin. Eventual ulceration around the ankle area is common.

Smoking restricts the peripheral blood vessels and must be strictly avoided. Circulation can be improved by having regular massage to the legs and low spine and to encourage the patient not to sit with legs crossed at any time, as this will greatly restrict circulation to the legs and feet.

When the opportunity allows, the legs and feet should always be raised, particularly when sitting watching television or generally relaxing.

A good whole-food diet with restrictions on high fat, salt and sugar and an emphasis on sufficient fibre should be followed, and processed and concentrated carbohydrate foods avoided.

Bitter melon also known as balsam pear is a tropical vegetable widely cultivated in South America and Africa, and has been used in folk medicine as a remedy for diabetes. The blood sugar lowering action of the fresh juice has been established in both experimental and clinical studies.

Onions, garlic and legumes also appear to have positive actions in lowering blood sugar levels.

Stress can have a detrimental effect on blood glucose control, therefore massage has an important role to play in diabetes. Relaxation can reduce stress hormones as well as glucose levels. Most of the hormones produced in response to stress tend to have the opposite effect to insulin and cause the glucose levels in the blood to rise. Most people simply produce more insulin to keep the blood glucose stable. However, in some cases if the reserves of insulin are inadequate the blood glucose level will climb, Such a person has temporary diabetes and the glucose level will usually return to normal once the stress is over. However it does increase the risk of developing permanent diabetes later on in life.

In a study conducted by two Professors of pediatrics, psychology and psychiatry in Florida, children with diabetes were randomly assigned to a massage therapy group. The children's parents were taught basic massage strokes, including the face, chest, stomach, legs, feet, arms and back, and were asked to massage their children for 20 minutes before bedtime for 30 consecutive nights. The immediate effects of the massage therapy were decreased parental anxiety and depressed mood and decreased child anxiety, fidgeting, and depressed affect. Over the 30-day period, compliance for insulin and food regulation improved and mean blood glucose levels decreased from 159 to 118 mg/dl. The 25% decrease in blood glucose levels more than met the 15% criterion for significant clinical change, and blood glucose levels moved into the normal range of 70-130mg/dl.

In summary, the role of massage in diabetes can be of great benefit to the individual, particularly in stimulating the skin and improving the nutrition to the skin's tissues, improving the nutrition of muscles aiding their healing, relaxing them reducing tension and pain, improving circulation of blood and lymph in the muscles resulting in improved circulation in the bones underlying them, improving their nutrition, growth and repair. Massage also aids the removal and absorption of waste products and strengthens the immune system. Relaxing both body and mind, massage stimulates the autonomic nervous system and helps to achieve optimum health – improving digestion, reducing blood pressure, releasing painkilling chemicals and balancing hormone action. And of course, with pregnancy massage now coming to the forefront, we can help prevent gestational diabetes.

Source of findings:

1. *Encyclopaedia of Natural Medicine – Michael Murray – Page 281.*
2. *Diabetes Spectrum, Volume 10, Number 3, 1997 – Massage Therapy Lowers Blood Glucose Levels in Children with Diabetes.*
3. *Healing Points Complementary Health Magazine – Autumn 2001, Number 1 Volume 6*

Shona Stewart is practising Reflexology, Aromatherapy, On-Site Massage, Remedial and Sports Massage and Indian Head Massage in Cannich, Inverness-shire and can be contacted on Tel. 01456 415403.



Eileen Freeman

**Personal Development
and Counselling**

*Specialising in Relationship
Problems for Couples and*

Coaching in Communication Skills and Assertiveness
Counselling for Confidence, Problems, Upsets etc.
Recovery from a Loss, or a Change in Life

FREE BROCHURE

Tel: (01224) 625598

*Lectures and workshops on basic counselling skills
Relaxation and Stress workshops available
33 Roslin Street, Aberdeen*