An approach to managing diabetes

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History

**Classical symptom presentation:**
- Polyuria
- Polydipsia
- Thirst
- Weight loss
- General malaise
- Fatigue
- Characteristic breath
- Recurrent infection

**Less common presentation:**
- Peripheral vascular disease
- Motor, sensory or autonomic neuropathy
- Visual changes
- Impotence

**High risk individuals:**
- Women with large birthweight babies
- Overweight
- Medication history:
  - steroids
  - thiazides
- Family history
- Ethnic groups:
  - Aborigines
  - Pacific races
  - Maltese

When the blood sugar level confirms the diagnosis of diabetes mellitus, the following should be undertaken.

Examination

A full physical examination should be undertaken paying particular attention to:

**Cardiovascular system:**
- blood pressure lying and standing
- peripheral circulation
- heart sounds
- carotid bruits
- renal bruits
- blood pressure
- peripheral circulation

**Eyes:**
- fundi
- acuity
- cataracts

**Neurological system:**
- sensation
- autonomic function
- reflexes
- vibration sense
- proprioception

**Skin:**
- evidence of infection;

**Feet:**
- condition of skin, nails
- edema

**Urine:**
- albumin
- ketones
- nitrites
- glucose

**Weight/height (BMI)**

Investigations

As part of screening a newly diagnosed diabetic, the following baseline tests should be undertaken.

**Blood screen:**
- urea
- creatinine

**Lipid pattern:**

**Liver function:**

**ECG:**

**Midstream urine microscopy**
- Culture and sensitivity if infection suspected.
Treatment

Any person with this diagnosis will benefit from the involvement of other service providers (team approach). Such patients require education (often repeated) about the diagnosis, its implications, and appropriate care. When available, a diabetes educator is often the best person to fulfill this need. Referral to the following is normally beneficial:

- sulfonylureas may be used in combination with metformin. Alternatives include glibenclamide (2.5–20mg per day in one or two divided doses), gliclazide (40–320mg per day in one or two divided doses), glipizide (2.5–4.0mg per day in one or two divided doses) and tolbutamide (500mg–3g per day in two or three divided doses). If the desired effect is not obtained with a sulfonylurea, it is most unlikely that changing to a different one will gain this effect.

- acarbose. This should be taken with the first mouthful of each meal. Dosage should commence at 50mg with the first mouthful of the evening meal and increase by 50mg per week, taken with meals, to a maximum of 100mg three times a day.

It needs to be ensured that the benefits and use of monitoring, generally be glucometer, are understood and complied with whatever possible.

Advice

- Team approach is important.
- Better control will delay complications.
- Need for monitoring, benefits of home glucometer use.
- Information about blood sugar levels at which the patient should be concerned.
- Need for regular review.
- How to recognize hypoglycemia and what to do.

Follow-up

Will need to occur weekly, or more often, until control is established and the patient is able to effectively understand, accept and manage the condition.

Diabetes – checkup

A checkup should occur three monthly for patients with diabetes mellitus.

The following should be reviewed:

History

- Medication problems
- Compliance with medication
- Home blood glucose testing and record of blood glucose
- Hypoglycemia
- Appetite
- Weight change
- Diet
- Risk factors, e.g., Smoking, alcohol.
- Feet
- Breathlessness
- Vision
- Urine
- Exercise
- Impotence
- Any other problems
### Approach to managing diabetes

#### Treatment and advice

Frequently no change will be required. Refer as needed for care to other members of the diabetes management team. Reinforce need for smoking cessation. Reinforce need for moderation of alcohol intake. Review understanding of diabetes education as required.

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<td>Peripheral pulses</td>
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<td>• Neurological examination</td>
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<td>Urine of albumin, nitrites</td>
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<td>Investigations</td>
<td>Glycosylated hemoglobin if poor control</td>
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Note: These may only be needed 2–3 yearly depending on the particular patient.

Adapted with permission from: