

# Symposium Proceedings

**"The Optimum Management of Type II Diabetes"**

**"Management of Hyperlipidaemia in Family Practice"**

**by Professor H C Seftel**

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Sponsored by R & C Pharmaceuticals



At the Port Elizabeth meeting on "Management of Hyperlipidaemia" are (left to right): Dr Basil Michaelides who chaired the meeting, Professor Harry Seftel (guest speaker), Pieter Pilon (specialist representative, Reckitt & Colman Pharmaceuticals)



At the Pietermaritzburg meeting on "Management of Type II Diabetes" are (left to right): Kevin Tromp, (OTC group product manager, Reckitt & Colman), Professor Harry Seftel (guest speaker), Don Naidoo who chaired the meeting, Mike Hoffman (specialist representative, Reckitt & Colman Pharmaceuticals), Steve Addison and Logan Naidoo (both medical representatives with Reckitt & Colman Pharmaceuticals).



Reckitt & Colman Pharmaceuticals recently sponsored a meeting on the "Optimum Management of Type II Diabetes" under the auspices of the Eastern Transvaal Branch of MASA. Seen sampling some Fybogel Orange at the meeting are Professor Harry Seftel (Professor of Medicine and Chief Physician, Wits University) with Peggy Proctor, specialist sales representative, Reckitt & Colman Pharmaceuticals.

## **Professor Seftel talks on the Management of Lifestyle Conditions**

*(Sponsored by Reckitt and Colman Pharmaceuticals)*

Reckitt and Colman Pharmaceuticals, manufacturers of Fybogel Orange, a pleasant tasting dietary fibre supplement, recently sponsored a series of continuing medical educational meetings in various centres in South Africa.

Meetings on the "Optimum Management of Type II Diabetes" were held on the East Rand (in association with the Eastern Transvaal Branch of MASA) and in Pietermaritzburg (in association with the Academy of Family Practice). A further meeting was held in Port Elizabeth, also under the auspices of the Academy of Family Practice, on the "Management of Hyperlipidaemia in Family Practice".

The summarised proceedings of both of Professor Seftel's presentations is published as follows.

# Optimum Management of Type II Diabetes

Professor H C Seftel

## Aims of Diabetes Management

Professor Seftel introduced his presentation by highlighting the overall aims of Diabetes Management.

These are firstly, to normalise total metabolism without hypoglycaemia. Secondly, to prevent complications by correcting risk factors such as:

- a) Smoking
- b) Hypertension (in diabetic patients, diuretics and beta-blockers should be avoided while ACE-inhibitors are preferred.)
- c) Hyperlipidaemia
- d) Obesity
- e) Sloth

The third aim of Diabetes Management should be to educate the patient in managing his illness to the best of his ability and to encourage him to enjoy the best quality of life possible.

## Essential Examinations in Diabetes

Mass, blood pressure and urinalysis should be monitored at each visit. Blood glucose and HbA1C should be measured once or twice a year. However, the remaining examinations such as heart, peripheral pulses, sensations and reflexes (the feet being the most important) and fundoscopy are only necessary on an annual basis. Cholesterol (and triglycerides if possible), creatinine and urea measurements should also be taken annually.

## Blood Glucose Control

The blood levels which should be aimed for are 4-6 mmol/l fasting and less than 4-8 mmol/l following meals. To monitor blood glucose levels Test Strip (HG 20-80 and Visidex II) or glucose meters are used. Glycosylated Hb will give a medium term picture (to monitor control over the past 8 weeks).

Urinalysis has many problems but is still useful for detecting extremes of hypo and hyperglycaemia.

## Management of Non-Insulin Dependent Diabetic's Diet

The most important factor in controlling blood glucose levels in the Type II Diabetic is diet. The patient should consume sufficient energy for their ideal body mass (Height in metres without the 1 before the decimal - ie if the patient is 1,80 metres tall, the approximate ideal weight is 80 kgs). The diet should consist of 55% carbohydrates and Professor Seftel stressed the importance of eating natural and fibrous foods; 30% fat of which there should be an equal balance between saturated and polyunsaturated fats. 15% of the diet should consist of protein (from vegetable and animal sources). A diet of these proportions will contain acceptable levels of cholesterol and sodium and will contain sufficient potassium due

to the high vegetable content.

Fibre is well documented as having a useful role to play in the treatment of diabetic patients and Professor Seftel highlighted the following modes of action:

- a) Fibre delays emptying of the gut thus slowing glucose absorption and improving glucose utilisation
- b) A high fibre diet has also been shown to improve cholesterol levels.
- c) A diet which is high in fibre content has also been shown to have favourable effects on the clotting factor.

Diabetic patients should be advised to limit alcohol intake (the maximum amount allowed should be 3-4 tots a day for males, with 1-2 tots for females).

## Exercise

Exercise said Professor Seftel should be "moderate not masochistic". It is important to avoid the dangers of cardiovascular death, dehydration, hypoglycaemia, foot damage with neuropathy and bleeding with proliferative retinopathy. On the other hand exercise offers the patient the benefits of increased glucose utilisation, mass reduction, improved physical fitness and possibly reduced morbidity and mortality.

## Medical Treatment

The drugs which are used in the treatment of Type II Diabetes are either sulphonylurea or metformin. Some authorities prefer sulphonylureas because they are more potent and are better tolerated. Others prefer metformin because the majority of Type II diabetics are obese and metformin, unlike the sulphonylureas does not cause weight gain. In addition metformin does not cause hypoglycaemia.



Seen at the recent meeting on the "Optimum Management of Type II Diabetes", sponsored by Reckitt & Colman Pharmaceuticals and held under the auspices of the Eastern Transvaal Branch of MASA are (left to right): Mr Kevin Tromp, group product manager, Reckitt & Colman Pharmaceuticals; Dr ED Sonnenfeld, vice chairman Eastern Transvaal Branch of MASA; Mrs A Weir, branch secretary, Eastern Transvaal Branch of MASA; Professor Harry Seftel, guest speaker.

# Management of Hyperlipidaemia in Family Practice

Professor H C Seftel

At the recent Seminar on "Hypercholesterolaemia and coronary heart disease in South Africa" organised by the Heart Foundation in Cape Town, it was agreed that the serum cholesterol levels of the South African White, Coloured and Indian populations are much too high and that efforts should be intensified to lower them.

Professor Seftel reported that this Seminar exhorted the populace to strive for a cholesterol level of 5 mmol/l and he coined the slogans 'Drive for Five' and 'Skuif na Vyf'. This is clearly, said Professor Seftel, a medium to long term objective.

Professor Seftel expressed the opinion that, in South Africa, hypercholesterolaemia is best managed by front line practitioners such as family doctors and doctors in polyclinics, outpatient departments and in the work situation.

This is firstly because South Africa has far too many individuals with marked hypercholesterolaemia - an estimated 50 000 people with monogenic familial hypercholesterolaemia and many more thousands with polygenic/environmental hypercholesterolaemia spread throughout the land - and too few lipid clinics or specialists to deal with them. Secondly, and more important, it is not usually necessary to refer patients with either mild or marked hypercholesterolaemia to specialists. Hypercholesterolaemia, irrespective of degree, has few causes, these are easily diagnosed and treatment is relatively simple.

In fact, said Prof Seftel, the family doctor is in a better position to treat this condition because of his better knowledge and access to the patient and family. Therapeutically front line practitioners can be as capable as specialists in deciding on the need for medication and monitoring its effects.

## A. The Main Causes of Hyperlipidaemia in South Africa are few

Raised *cholesterol* is caused by:

1. Familial hypercholesterolaemia (1 in 75 Afrikaners and Jews)
2. Diet high in saturated fats (red meat gluttons)
3. Drugs eg thiazide diuretics
4. A few diseases - hypothyroidism, nephrosis, cholestasis

Raised *triglyceride* caused by:

1. Obesity
2. High carbohydrate diet
3. High alcohol intake
4. Diabetes mellitus
5. Drugs eg beta-adrenergic blocking agents

## B. The Diagnosis of Hyperlipidaemia is Easy

History consists of a few simple questions:

1. Have you had a chest pain, leg pain or stroke (big or small)?
2. What do you eat and drink and what medicine do you take?
3. Tell me about your family - Afrikaner or Jew? Anybody else have high cholesterol? What did they die of and at what age?
4. Has your raised cholesterol been treated? If so with what and with what result?

The relevant *examination* is equally simple:

1. Mass and height
2. Eyes for corneal arcus and xanthelasma
3. Hands, elbows, knees and especially heels for tendon xanthomas
4. Heart and neck arteries for bruits
5. Diminished or absent pulses
6. Urinalysis - glucose, protein, bilirubin

*Plus*

Examination of first degree relatives for

1. Serum cholesterol and triglyceride levels
2. Foregoing clinical examination

## C. Therapy is also Simple

1. Treat the cause wherever possible
2. Correct risk factors for coronary heart disease - smoking, hypertension, obesity and sloth.
3. Diet which can be both prudent and palatable - not only is diet a natural cure but if medicines have to be used their efficacy is maximised by dietary adherence.
4. Medicines for hyperlipidaemia are simple, safe and administrable in standard dosage:
  - (i) cholestyramine 8 g BD - lowers LDL cholesterol
  - (ii) probucol 500 mg BD - lowers LDL and HDL cholesterol
  - (iii) bezafibrate 200 mg BD or TDS - lowers LDL cholesterol and triglyceride and raises HDL cholesterol
5. Monitor effects on serum lipids - 1 to 4 times yearly.

Specialists and lipid clinics obviously do have a role in helping to resolve diagnostic and therapeutic problems. However, if the approach outlined is adopted, the need for consultation should be small and usually resolvable telephonically. The main role of specialists are in the management of cardiovascular complications and in training, education and research.

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