

## D) Fibrates

**Fibrates are a group of lipid lowering drugs that have been in existence since 1963. They include: bezafibrate, gemfibrozil and fenofibrate.**

### When are fibrates used?

Fibrates are prescribed most often to patients with mixed or combined hyperlipidaemia. In such cases raised cholesterol levels are associated with raised levels of triglycerides. Triglycerides are energy-giving fats that are found in foods and in body storage tissues.

Raised levels of triglycerides circulating in the blood are linked to the abnormal pattern of other blood fats (lipids) and disturbances of blood clotting mechanisms.

Raised triglycerides are associated with an increased risk of coronary heart disease and therefore require treatment. In particular, raised levels of triglycerides are often associated with low levels of HDL cholesterol.

Other candidates for drug therapy with fibrates include individuals with raised triglycerides alone who are at risk of pancreatitis.

### How do they work?

Fibrates can lower triglyceride levels by up to 50%. Cholesterol may also be lowered by up to 25% using the more modern fibrates. The drug acts by several mechanisms, the principal effect being to reduce VLDL (very low density lipoproteins) in the blood. These structures are composed predominantly of triglycerides.

Treatment with fibrates tends to increase HDL (high density lipoproteins – ‘good’ cholesterol) levels by 10-15%. The general alteration in blood fats achieved by fibrates helps to slow or halt the build-up of cholesterol in the arteries, thereby reducing risk of heart attack.

### Considerations when taking a fibrate

Side effects of fibrates commonly prescribed are minimal and usually temporary. Those more frequently cited include gastrointestinal discomfort, nausea, headache and skin rash. Very rarely, muscle aches or liver disturbances can occur.

Some people with hyperlipidaemia may be treated with a fibrate and a statin, a different type of lipid lowering drug. In such cases the risk of muscle and liver damage is increased and routine blood tests are available to monitor this.

Fibrates should not be used during pregnancy or for individuals with liver or kidney disease. This includes people with diabetes who have kidney complications.

Care should be taken in individuals taking anticoagulants such as warfarin.

The spectrum of activity of the fibrates is particularly well suited to the management of hyperlipidaemia in diabetes, where the nature of the lipid abnormality is more often of a raised triglyceride and low HDL cholesterol.

