

Diabetes drug linked to increased risk of heart failure

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Rosiglitazone, a drug used to treat type 2 diabetes, is associated with an increased risk of heart failure and death among older patients compared to a similar drug (pioglitazone), concludes a study published on BMJ.com today.

As such, the researchers say it is difficult to advocate continued use of rosiglitazone for most patients.

Rosiglitazone and pioglitazone belong to a class of drugs called thiazolidinediones and are widely used for the treatment of [type 2 diabetes](#). They help to control blood sugar levels, but both drugs can also cause side effects including weight gain, fluid retention and [heart failure](#).

It is unclear whether there are clinically important differences in the cardiac safety of these two drugs, so researchers in Canada compared the risk of heart attack, heart failure and death in patients treated with rosiglitazone and pioglitazone.

Using prescription records, they identified nearly 40,000 patients aged 66 years and older who started treatment with either rosiglitazone or pioglitazone between April 2002 and March 2008.

Data on hospital admission for either a heart attack or heart failure during the six-year study period were recorded and deaths were identified from a national database.

Detailed analysis showed that patients treated with pioglitazone had a significantly lower risk of heart failure and death compared to patients treated with rosiglitazone, but there was no significant difference in the risk of [heart attack](#).

The researchers estimate that, for every 93 patients treated with rosiglitazone rather than pioglitazone, one additional cardiovascular event or death would be predicted to occur annually.

"Our findings suggest clinically important differences in the cardiovascular safety profiles of rosiglitazone and pioglitazone in clinical practice," say the authors. "Given the accumulating evidence of harm with rosiglitazone treatment and the lack of a distinct clinical advantage for the drug over pioglitazone, it is reasonable to question whether ongoing use of rosiglitazone is justified," they conclude.

This study reinforces the message that thiazolidinediones should be avoided in heart failure patients, but the claim that pioglitazone is safer than rosiglitazone is not fully supported by the data, say two experts from the Universities of Bath and Surrey in an accompanying editorial.

Although it may be tempting to move away from prescribing thiazolidinedione altogether, they write, long term follow-up data for newer products are not yet available.

Given that randomised trials are unlikely ever to provide the full picture, they suggest that enhancements to healthcare databases coupled with well designed studies like this one are essential for determining the full risk-benefit profile of medicines. People who have concerns regarding their diabetes treatment are urged to consult their GP and not to discontinue taking their medication.

Source: British Medical Journal ([news](#) : [web](#))

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