

A word of caution regarding pioglitazone

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Madam, Pioglitazone is an antidiabetic of the thiazolidinedione (TZD) class. It is mainly used to treat patients suffering from diabetes mellitus 2, due to its insulin-sensitizing action on body tissues. The drug has gained a lot of popularity as it is affordable, potent, and can be taken in conjunction with almost any other diabetic medication. However, pioglitazone is not completely free of shortcomings; it is known to commonly cause weight gain and oedema, and it increases the risk of congestive heart failure in patients with underlying coronary artery disease.¹ Even then, authorities deemed this drug to be more beneficial than harmful, and it was marketed.

However, a 2012 study published in *Diabetologia* raised new, more serious concerns - it showed that pioglitazone exposure caused a statistically significant increase in the risk of bladder cancer.² The study had a huge impact, and led to France, Germany and India recalling pioglitazone.

This is not the only study to show these results. A 2016 study conducted by Tuccori et al. compared the incidence of bladder cancer in diabetic patients using pioglitazone to diabetic patients not using the drug.³ Data from 145,806 subjects were evaluated and the incidence of bladder cancer in pioglitazone users was found to be 121.0 per 100,000 person years while in patients using other antidiabetics the incidence was only 88.9 per 100,000 person years.

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These worrying statistics once again raise the question: Is pioglitazone safe to be marketed?

The drug is still being prescribed in many countries, including Pakistan. Physicians should prescribe this drug with caution, as it is contraindicated in patients at risk for bladder cancer, and research has shown this malignancy to be highly prevalent in Pakistan, especially amongst men.⁴ If patients taking pioglitazone experience haematuria or painful urination, they should seek immediate medical attention. Physicians also need to make sure the patient being prescribed pioglitazone does not have underlying heart problems, and look out for early signs of CHF in them.

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References

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