

CANCER

Diabetes therapies affect pancreatic cancer risk

The type of therapy that diabetic patients receive affects their risk of pancreatic cancer, according to a new study. Patients with diabetes who receive metformin have a reduced risk of pancreatic cancer, whereas those who receive insulin have an increased risk of the disease, reports lead researcher, Donghui Li.

Type 2 diabetes is a known risk factor for pancreatic cancer. Epidemiological studies have demonstrated that antidiabetic therapies modify the risk of cancer in general, while metformin has demonstrated antitumor activity in a hamster model of pancreatic cancer. These findings led Li and colleagues to investigate the association of antidiabetic therapies and risk of pancreatic cancer in patients with diabetes.

The researchers categorized patients with diabetes with and without pancreatic ductal carcinoma according to the type of antidiabetic therapy used. Patients

who took metformin had a 62% reduced risk of pancreatic cancer than those who had never used metformin. By contrast, patients who had taken insulin had a fivefold increased risk of pancreatic cancer than those who had never used insulin. "Our findings support a role for metformin as an antitumor agent for the pancreas", says Li.

The researchers explain that further research is needed to understand the mechanisms underlying the association between metformin or insulin use, and pancreatic cancer risk. They also hope to investigate whether antidiabetic therapies affect clinical outcome for patients with pancreatic cancer.

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