



## People with type 2 diabetes urged to check medications before their operation

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Anaesthetists are warning people with type 2 diabetes that a particular type of medication prescribed in Australia for some patients with the condition may affect their recovery after an operation.

According to the Australian and New Zealand College of Anaesthetists (ANZCA) the drugs, known as sodium-glucose co-transporter 2 (SGLT2) inhibitors, are prescribed to some patients with type 2 diabetes. As anaesthetists prepare for National Anaesthesia Day on Wednesday, October 16 they are warning that the medications can reduce the risk of diabetes complications – including heart failure and kidney failure – but may cause complications for some patients after their operations.

“It is important that anyone taking these medications who is preparing for an operation talk to their GP, diabetes specialist, anaesthetist and surgeon to discuss how this medication may affect their recovery from surgery,” Professor David Story, Foundation Chair of Anaesthesia at the University of Melbourne, and a member of ANZCA’s Research Committee said.

People taking the medication can occasionally become unwell with a condition called euglycaemic diabetic ketoacidosis (a potentially dangerous build-up of acid in the blood) during or after their operation and diagnosis can be delayed or missed because the patient’s blood sugar level does not increase.

Diabetic ketoacidosis is a serious complication when the body does not have enough insulin. This leads to the body using fat to produce energy and this process leads to the accumulation of acids (ketones) in the body.

“The stress on the body of surgery combined with prolonged fasting can increase the risk of diabetic ketoacidosis,” Professor Story explained.

If diabetic ketoacidosis is not diagnosed and treated, more serious signs and symptoms including dehydration, confusion and coma can potentially develop. Some patients need Intensive Care Unit admission.

To try to avoid this complication, patients may be advised to stop these drugs one to three days before more major procedures such as a knee replacement, and one day before more minor procedures such as a colonoscopy.

About one million people in Australia have type 2 diabetes. ANZCA consulted with the Australian Diabetes Society for the patient advice on SGLT2 inhibitors which are marketed in Australia and New Zealand as dapagliflozin and empagliflozin.

These medications include dapagliflozin (Forxiga), empagliflozin (Jardiance), ertugliflozin (Steglatro) as well as fixed dose combinations with metformin (Xigduo, Jardiamet, Segluromet) or with gliptins (Glyxambi, Qtern, Steglujan).

While it is not known how many people are taking the SGLT2 inhibitors, Professor Story said it was increasingly being prescribed for people with type 2 diabetes. The drugs are often prescribed in combination with insulin or other oral hypoglycaemic medications to help control the levels of blood sugar (glucose) in patients with type 2 diabetes.

The ANZCA advice about the risk of euglycaemic diabetic ketoacidosis highlights the importance of patients discussing their medications with clinical staff involved in their care including the anaesthetist before their operation.

“Preparing for your anaesthesia” is the message for this year’s National Anaesthesia Day on Wednesday October 16. The day is organised by ANZCA and marks the first time ether anaesthesia was demonstrated in Boston, Massachusetts 173 years ago.