Increased risk appeared within 2 months after switching
Increased risk persisted for the entirety of the 24 months of follow-up, albeit with reduced intensity

Is Initiating Insulin for Type II Diabetes Associated with an Increased Risk of Fracture?
Exogenous insulin is associated with an increased risk of fracture

Is switching from oral antidiabetic agents to insulin associated with an increased fracture risk?
How soon after switching does the risk appear and for how long does it persist?

Italian healthcare utilization databases of Lombardy

Patients undergoing oral antidiabetic therapy from 2005 to 2009 (n = 216,624)
Modification of oral antidiabetic therapy (n = 136,307)
Insulin (active exposure, n = 28,420)
Oral medication (referent exposure, n = 107,887)
Analysis of fracture risk using hazard ratio (HR)

Active exposure increased the risk of fracture

Any fracture
Hip fracture
Vertebral fracture

0 2 24

Increased risk appeared within 2 months after switching
Increased risk persisted for the entirety of the 24 months of follow-up, albeit with reduced intensity

Corrao et al. (2020)
DOI:10.1097/CORR.0000000000001089

Changing from an oral antidiabetic medication to insulin is associated with increased risk of fracture, particularly in the first two months immediately following the switch.
The association may result from hypoglycemia-related falls, but future studies will need to investigate the mechanism behind the observed increased risk.
In the meantime, insulin dosage should be carefully controlled and measures should be taken to reduce the risk of fractures in these patients.

However, it is unclear whether this is caused by the medication itself or is a result of increased severity of diabetes.

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