NHS
Suffolk and
North East Essex

Serious Interaction: Tramadol - Warfarin/ vitamin K antagonists

Introduction

A prevention of future deaths report was issued by a coroner in November 2023 where the cause of death was the result of an interaction between warfarin and tramadol. The interaction caused exceptional thinning of the blood. The patient, who was previously stable on warfarin was prescribed a short course of tramadol for lower back pain. Their INR rose from 3.3 to 11.6. Her cause of death was bleeding in the brain.

Step 1	**Know the facts** The interaction between **tramadol** and **vitamin K antagonists (warfarin sodium**, **acenocoumarol** and **phenindione)** can cause raised INR and in turn increased risk of bleeding. This interaction is now categorised in the BNF as a severe interaction and the clinical systems alert to the interaction. The MHRA included details of the interaction in their drug safety bulletin (June 2024).
2	**Patient Identification** **Method 1:** Request NHS numbers following the process outlined in the ePACT2 **Alerts Dashboard**. This dashboard highlights the number of unique patients co-prescribed tramadol and warfarin within an individual practice. **Method 2**: Run a search on the practice clinical system to identify current patients on the combination. The tramadol may be on an acute or repeat prescription.
3	**Action Required:** **Ensure that INR is monitored before and after any interacting medications are commenced, the dose is changed or discontinued.** • Patients who are stable on the combination and considered not at risk, should have this documented in the medical record. • Consider prescribing an alternative opiate to tramadol, such as codeine. • Counsell patients on signs and symptoms to be aware of (list given in the MHRA drug safety bulletin) and seek medical advice if any are experienced.

References:

- Courts and Tribunals Judiciary. Susan Gladstone. Prevention of future deaths report. *Regulation 28 Report to Prevent Future Deaths*. 2023. https://www.judiciary.uk/preventionoffuture-death- reports/susan-gladstone-prevention-of-future-deaths-report/
- British National Formulary. BNF (online). https://bnf.nice.org.uk/interactions/tramadol/ (Accessed 15th Jan 2025)
- Business Authority. ePACT2 – Dashboards and specifications. *ePACT2)*. https://www.nhsbsa.nhs.uk/access-our-data-products/epact2
- Warfarin: be alert to the risk of drug interactions with tramadol. MHRA Drug Safety bulletin. June 2024 https://www.gov.uk/drug-safety-update/warfarin-be-alert-to-the-risk-of-drug-interactions-with-tramadol

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