

Immediate type/anaphylactoid reaction

A 45-year-old man developed generalised urticaria, lip angioedema, cough and wheeze within 30 minutes of taking two tablets of naproxen 250 mg and amoxicillin 500 mg immediately before tooth extraction.

His previous history included mild asthma (for which he used a salbutamol inhaler as required), and chronic back pain. Questioning revealed previous urticaria and/or angioedema episodes associated with ibuprofen and diclofenac. He had tolerated amoxicillin on several occasions before, but this was his first use of naproxen.

Paramedics arrived within 20 minutes. Low systolic pressure (60 mmHg) was documented. Adrenaline 0.3 mg was given IM, and other measures included normal saline infusion, nasal oxygen, nebulised salbutamol, chlorpheniramine (10 mg) and hydrocortisone 100 mg IV. He was kept in hospital for six hours under monitoring and discharged with a three-day course of oral cetirizine 10 mg and prednisolone 30 mg daily.

He was advised to avoid all NSAIDs and beta-lactam antibiotics until he had been assessed in the specialist allergy clinic. Mast cell tryptase samples taken 90 minutes and four hours post-event later showed markedly elevated levels indicating a mast cell-mediated process (not necessarily anaphylaxis) but subsequent clinic samples confirmed that tryptase levels had returned to normal.

Six weeks later, normal/negative skin prick testing was followed by intradermal testing against penicillin derivatives, and benzylpenicillin, ampicillin and amoxicillin. With written consent, a drug provocation test with oral amoxicillin was carried out which was successful ruling out the latter as the culprit. It seemed likely that he had suffered an anaphylactoid reaction to naproxen and should therefore avoid all NSAIDs. (Skin tests are almost always unhelpful for aspirin and NSAIDs, and were not performed).

At follow-up, a supervised graded challenge with meloxicam was uneventful. He was given a MedicAlert application (NSAID intolerance but meloxicam safe to use) and a copy of the discharge letter. He was advised to discuss optimal control of his asthma with his GP.