Healthcare Improvement Scotland | SAPG Safeguarding antibiotics

Protocol for Implementation of Penicillin Allergy De-Labelling in Adult Patients in Acute Hospitals

BACKGROUND

Tackling inappropriate penicillin allergy labelling has been identified as a key antimicrobial stewardship initiative by SAPG and supports "Realistic Medicine" by individualising patient care and reducing risk of harm and wasteful prescribing. Approximately 10% of hospitalised patients are labelled as penicillin allergic but the vast majority have not experienced an allergic reaction, rather another type of adverse reaction, often due to gastric upset. In addition many reactions to penicillin have occurred over 10 years ago and details of the reaction are not recalled. Having a label of penicillin allergy results in patients receiving sub- optimal alternative antibiotics when they have an infection and this may lead to poorer outcomes including increased risk of C. difficile, antimicrobial resistant infections, longer hospital stay and other adverse events. It is therefore beneficial to assess whether patients have experienced a true allergic reaction and for patients with other types of adverse reaction or an unclear history to consider removing their allergy label.

DEVELOPMENT OF A PROCESS FOR ORAL PENICILLIN CHALLENGE

SAPG has developed and piloted a penicillin allergy screening algorithm and challenge test to support the identification and removal of penicillin allergy labels in patients who do not have an acute Type 1 hypersensitivity reaction. To support this process we have developed a toolkit which includes the following:

- Protocol for the process
- Risk algorithm to identify suitable patients including a standard procedure for the challenge test
- Patient information leaflets – pre- test information including consent form, information for patients after the test (both negative and positive result)
- Advice on how to manage a patient who develops a severe allergic response during the test
- Frequently asked questions for clinicians assessing patients and performing the test
- Standard letters for patients' GP to communicate negative or positive test result and actions required.

IMPLEMENTATION OF THE PENICILLIN ALLERGY DE-LABELLING (PADL) PROCESS WITHIN HOSPITALS

It is important for Antimicrobial Management Teams (AMTs) to liaise with key clinical colleagues and governance structures within their boards to ensure the safe and appropriate implementation of the process.

Local lead(s) for process

It is important to identify a local clinical lead (Consultant) to lead the process in each hospital working in collaboration with the board AMT. The process can be carried out in a range of wards agreed with local specialists. Experience to date has included use in Respiratory and Infectious Diseases wards, Pre-op assessment clinics and Out-patient Antimicrobial Therapy settings.

Local governance requirements

Local governance systems must be included within plans to implement the process and be content with the protocol and associated documentation. We suggest discussing with the Medical Director, Area Drug and Therapeutics Committee, local safety/risk committee and any other groups or individuals you feel should be informed. This may vary by board. If there are any concerns locally please let us know and we will try to address these.

Patient inclusion/exclusion criteria

Patients will be screened using the algorithm to determine if they are suitable for de-labelling. This involves the attending clinician making a full assessment of the history of patients' previous reaction to penicillin. This may require contacting the patient's GP. Specific exclusion criteria are detailed within the algorithm document but in addition the following patients should be excluded from the algorithm based approach:

- Any patients who are deemed as acutely unwell and particularly if haemodynamically unstable
- Currently requiring antibiotic treatment for a severe infection
- Unable to provide written consent to the oral challenge test due to their clinical condition or underlying disease.

Procedure for oral penicillin challenge

Patients identified as suitable for an oral penicillin challenge test will be given written information about the test and what will happen afterwards.

Patients will be asked to give written consent to the test as part of discussion with the clinical team. The oral penicillin challenge test will be carried out using the standard procedure and details of the test including starting and finishing time and its result will be documented in the medical notes.

Communication of test result

After the test is complete patients will be given written information about the result of their test.

This will confirm either that they can be de-labelled i.e. they are not allergic to penicillin and can receive a penicillin-type antibiotic for future infections, or that they have a confirmed penicillin allergy (acute hypersensitivity reaction) and should not receive a penicillin-type antibiotic for any future infections. Hospital electronic records and case notes should be updated to remove penicillin from the patient's 'Allergies' fields by medical staff. This should be completed as soon as possible and on the same day as the test has been performed.

A standard letter will also be sent to the patient's GP Practice advising of the test result and the need to remove their Penicillin allergy label or confirming they have a penicillin allergy. This letter should accompany the patient's discharge letter to facilitate updating allergy status in GP records.

Data collection

During the pilot of the process data was collected on all patients who have been screened using the algorithm, those offered an oral challenge and those who complete an oral challenge. Data collection forms are available on request if teams wish to collect this data locally.

Feedback on the process

During the pilot of the process data feedback was gathered from local leads, medical staff carrying out the test and patients to determine the acceptability and feasibility in routine clinical practice using short feedback surveys. Feedback forms are available on request if teams wish to collect this data locally.

SAPG also encourages feedback from clinical teams about any aspect of the process and invites suggestions for improvements. This can be done via our generic email address hcis.sapg@nhs.scot