Oral drug challenge for penicillin allergy de-labeling

Exclusion Criteria

- High Risk[a] on **PCN allergy questionnaire**
- On a beta blocker, steroid or antihistamine
- Developmental delay with inability to communicate effects of allergic reaction
- Rash, vomiting or wheezing/asthma exacerbation in the last 24 hours
- Age less than 2 years old
- Prepared for discharge [do not delay discharge to challenge]

Patients meeting exclusion criteria are still eligible for oral challenge on a case-by-case basis pending thorough review by the primary team.

Inclusion Criteria

- Documented allergy to penicillin, amoxicillin or amoxicillin-clavulanic acid in EMR
- No Risk or Low Risk [a] on **PCN allergy questionnaire**
- Caregiver interested in delabeling [b]

Abbreviations

EMR – electronic medical record
PCN – Penicillin
AVS – After Visit Summary

Oral Challenge Eligible

Oral Challenge Order Set

- Provider to place a one time dose of the inciting drug via **"Penicillin Oral Challenge for Hospitalized Patients"** order panel*

Administration & Monitoring

- Caregiver available to stay with patient for one hour during dayshift
- RN administer drug to patient
- RN to check-in[c] at 15 minutes & 60 minutes

No Risk

- Questionnaire result of "No Risk" indicates patients do not require oral challenge, but can be considered to increase family comfort.

Did a reaction occur?

Yes

- Treatment
  - Isolated Non-Respiratory symptoms[d]
  - Anaphylaxis[e]
- Keep allergy in chart & document failed drug challenge in allergy tab
- Resident/provider to complete communication loops with the following groups[f]
  - Family/Caregiver/Patient
  - Outpatient Pharmacy
  - Primary Care Provider

No

Provider Responsibility:
- Remove Allergy from patient's EMR ("Challenge/test completed with reaction")
- Add new negative allergy to patients EMR ("Negative PCN Oral Challenge")
- Complete communication loops with the following groups[f]
  - Family/Caregiver/Patient
  - Outpatient Pharmacy
  - Primary Care Provider

Penicillin Allergy Questionnaire[a]

- Questionnaire is built into the EMR in the Admission Navigator
  - Available to be completed by any pharmacist or provider
  - Results available to be viewed by any nurse, pharmacists or provider
- Questionnaire results indicate severity of allergy (No Risk, Low Risk or High risk), which should be updated in the Allergy tab (BPA will prompt) following completion of questionnaire

Family interested [b]

- Bedside nurse should provide caregivers with a copy of teaching sheet (1882) "Drug challenge in the hospital". Teaching sheets are posted on Children's Connect, search "1882"

RN Check-in[c]

RN to evaluate patient 15 minutes and 60 minutes after drug administration for the development of the following symptoms:
- Rash/itching
- Lip/tongue swelling
- Changes in breathing patterns

This also provides an opportunity for the caregiver to ask additional questions.
A task will fire reminding the nurse to do check-ins, click 'done' on the task to document the check-in

Isolated Non-Respiratory Symptoms[d]

- Call provider to assess patient
- Consider giving diphenhydramine (notify provider of administration)
- Closely monitor patient for 2 – 4 hours for progression of symptoms

Anaphylaxis[e]

- Call provider (or RRT if indicated for cardio-pulmonary compromise)
- Give IM epinephrine
- Stabilize/decide if a transfer is needed
- Closely monitor patient for 2 – 4 hours for progression of symptoms

Complete Communication Loops[f]

- Family/Caregiver/Patient: verbally explain the results
  - Comment on the AVS that the oral challenge has been completed and the results
  - Teaching sheet to print automatically with AVS
  - Complete **wallet card** (located in team rooms) with results of the study
- Outpatient Pharmacy: Ask family/caregiver/patient to ask the pharmacy to remove the allergy as applicable (show AVS/wallet card to pharmacy if needed)
- Primary Care provider: provide information that the oral challenge has been completed and the results of the test on the Discharge Summary (.IPPENCILLIN)

* Either treatment dose or standard doses of 500 mg (capsules) /520 mg (liquid) of amoxicillin and amoxicillin-clavulanic acid are appropriate for all patients over 2 years old

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