Government of **Western Australia**
WA Country Health Service

Your Ref : Alert_ Best Practice
Our Ref : ED-CO-20-92185
Enquiries to : RHD Register: 1300 622 745

Practice Alert
For Best Practice Software users in Western Australia

Under-dosage of Benzathine benzylpenicillin G (Bicillin L-A®)

Due to an incorrect update in Best Practice software it is recommended that practices using Best Practice review prescriptions and administration history for all individuals prescribed routine long acting benzathine benzylpenicillin G (Bicillin L-A®) since March 2019.

Under-dosage of long acting benzathine benzylpenicillin G (Bicillin L-A®) in people who require secondary prophylaxis for acute rheumatic fever (ARF) may put the patient at risk of Streptococcal A infection and ARF.

Be alert for symptoms of Streptococcal A infection and ARF in people who have may have been under-dosed including:

- Fever
- Sore throat
- Infected skin sores
- Painful swollen joints
- Shortness of breath
- New heart murmur
- Signs of heart failure
- Chorea (up to 6 months post exposure)

Any patient who appears to have had one or more incorrect doses should have a medical review to assess valve status in comparison to prior, plus a full chart review to look for episodes of possible strep A-related illness. Should there be any concern of progression of valve disease or possible episode of ARF, an echocardiogram is recommended.

In addition, if the patient weighs ≥20kg, they should be given a full dose of benzathine benzylpenicillin G (Bicillin L-A®) 1,200,000 units and the usual recall reset for the next dose at 21 or 28 days, whichever is appropriate for that patient.

Background

- There are currently approximately 1100 people with a history of ARF or diagnosed with RHD in Western Australia.
- Late or ineffective delivery of secondary prophylaxis injections can result in breakthrough streptococcal infections, further episodes of ARF and damage to heart valves (RHD).

Current situation

- Long acting benzathine benzylpenicillin G (Bicillin L-A®) is recommended secondary prophylaxis following a diagnosis of acute rheumatic fever and for some people with rheumatic heart disease (RHD).
- A TGA update required Pfizer to relabel benzathine benzylpenicillin (Bicillin L-A®) previously expressed in milligrams to international units.
- An error in Best Practice software prescribing occurred when the previous 900mg/2.3ml dose was incorrectly replaced with the 600,000 unit/1.17ml dose instead of the correct equivalent of 1,200,000 units/2.3ml dose.

Actions taken/pending by Best Practice software

1. Best Practice has advised that the potential issue should only have arisen when **re-prescribing** Bicillin L-A®) due to an incorrect update which incorrectly linked the old formulation.
2. In their December Data Update, Best Practice will remove the old formulation from the database which will resolve the issue.
3. Best Practice has issued a notification to their users recommending ceasing the current prescription and creating a new prescription for the appropriate value until this is resolved in their December Data Update.

November 30, 2020

WA RHD Register & Control Program:
Telephone 1300 622 745 - Email: RHD.Register@health.wa.gov.au - Secure Fax: 6553 0899

This practice alert is being forwarded to you on behalf of the WA RHD Control Program and Rheumatic Heart Disease Australia as an alert for individuals living with ARF/ RHD who receive routine long acting benzathine benzylpenicillin G (Bicillin L-A®) injections.