

**memorandum**

Date: 27 July 2006 **Reference:**

To: REMOTE HEALTH CLINICAL STAFF
REMOTE HEALTH MANAGEMENT
RHEUMATIC HEART DISEASE PROGRAM STAFF
SEXUAL HEALTH UNIT STAFF

From: PROFESSIONAL PRACTICE COORDINATOR, REMOTE HEALTH

Subject: **PAN BENZATHINE PENICILLIN PROTOCOL**

Many clinicians in Aboriginal health are worried about the impact of the new formulation of benzathine penicillin, Pan Benzathine Penicillin, on client care. It has been assumed that the increased volume required for its injection will cause increased pain at the injection site, and a lower acceptability of the treatment by the patient. There is evidence that this may prove to be incorrect. What is known is that if staff develop a negative attitude toward Pan Benzathine Penicillin, then that will make patients apprehensive, and may increase the chance of a negative experience by the patient.

The factors which lead to pain at an injection site, both at the time of the injection and in the hours afterward, are many, but include:

- location of injection
- temperature of the injected product
- volume of injection, and its speed of introduction
- viscosity and pH of the injection
- presence of exacerbating (eg. anxiety) and relieving (eg. 10 seconds pressure at intended site prior to injection) factors
- client factors such as past experience

Promotion and information regarding the new product needs to be made in a professionally sound manner, for the purpose of managing this changeover as positively as possible.

Please consider the following discussion points:

- Staff attitude can significantly influence a client's acceptance of treatment.
- We do not have a known suitable alternative. Extensive work has gone into seeking an alternative, but none is available.
- Oral therapies have not been shown to prevent attacks of rheumatic fever, and in our high-risk client group it is not responsible to offer it as a therapeutic alternative.

- Benzathine penicillin remains the best treatment for syphilis and prophylaxis for RHD clients. The risk of an adverse event due to offering alternative treatments far outweighs arguments against supporting this known effective treatment.
- The Pan Benzathine injections may not be as painful as Bicillin LA, due to lower viscosity and other factors (anecdotal evidence from overseas) plus the opportunity to utilise Lignocaine as diluent. (Lignocaine effectively reduces the pain of some other IM drugs, we need to review whether it is of benefit in this situation.)
- Injection technique is worth attention to minimise discomfort, including:
 - Using the preferred injection site of upper/outer quadrant of the Gluteus maximus
 - Warming the injection
 - 10+ seconds of pressure to the injection site prior to administering
 - SLOW injection over several minutes is preferred.
- We need reliable data on your experience of using the new product. Please use the Feedback sheet to detail experience with administering the Pan Benzathine product, as a way of helping gain a body of information that may assist further direction. (The Feedback sheet has been provided elsewhere, or is available from myself or the RHD Program)

In addition to the information that will be gained from the above feedback mechanism, there is interest by Menzies School of Health Research to do a formal randomised, double blind trial looking at the effectiveness of Lignocaine as a diluent. While this is being proposed and there is yet some necessary groundwork to establish the research project, this is flagged here so that individual health centres who are interested could self nominate their interest to be involved. If you are interested, please contact Dr Bart Currie at bart@menzies.edu.au to express your interest.

Please assist in supporting compliance levels in the use of Pan Benzathine Penicillin where it is indicated, through a positive appreciation of the surrounding factors.

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