Reducing the pain of intramuscular benzathine penicillin injections in the rheumatic fever population of Counties Manukau District Health Board

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Summary: Outcomes are reported in this paper from a survey involving patients with rheumatic fever treated with four weekly intramuscular (IM) benzathine penicillin injections in the Counties Manukau District Health Board (CMDHB) region. The survey evaluated the effectiveness of 0.25 mL of lignocaine 2% and a vibrating device with cold pack (Buzzy) for pain management of their injections. Patients were also questioned about their fear. The lignocaine was mixed in with the benzathine penicillin prior to administration. Pain scores were assessed during, at 2 min and 1 hour after administration and the following day. Pain at injection delivery and fear scores were higher for participants aged ≤13 years. Overall pain scores were significantly reduced with lignocaine and Buzzy over all four time points and following day. Pain at injection delivery and fear scores were higher for participants aged ≤13 years. Overall pain scores were significantly reduced with lignocaine and Buzzy over all four time points and there was a corresponding significant reduction in fear of the injections. Lignocaine and Buzzy resulted in a greater reduction in pain than lignocaine alone, only when the injection was being administered to those ≤13 years. Results of a file audit undertaken five months later showed that 66% of all rheumatic fever patients of CMDHB were choosing to use lignocaine and 43% were choosing to use Buzzy. In total, 71% of all rheumatic fever patients were choosing one or both of these analgesic interventions.

Comment: A great example of research that is not only driven by a local health issue but reports on implementation.

Reference: J Paediatr Child Health 2014;50(2):112-7

Abstract