

INVESTIGATION INTO BENZYL PENICILLIN INJECTION THERAPY IN ITALIAN CHILDREN

RESEARCH LETTER

Summarised by Dott.ssa Emanuela Ferrarin (June 2025)



This survey was conducted in June 2022 among the Italian Facebook Group "Endocarditis, Chorea and/or PANDAS". This is a mutual support group for parents of children on long-term treatment to prevent complications or recurrence of Rheumatic fever and/or PANDAS. Benzylpenicillin injections are the most frequently used treatment for this purpose in Italy, and the survey describes problems identified with this from the families' experience. 49 Italian families participated in the survey. Children typically started treatment between the ages of 5 and 10 years old and had been receiving it for an average of 5 years. In most cases they started with injections formulated without anaesthetic, and almost all had experienced pain at the first injection (98%). As a result, in most cases (75%) the first medicine used was changed for pain-related reasons or other issues, and this was found to reduce the impact of pain. To enable this change most families (71%) had to pay the cost of purchasing the medicine formulated with anaesthetic from international pharmacies. At the first injection, most families (84%) were informed by healthcare personnel about the likelihood of pain, but in most cases (61%) no suggestions to reduce it were given and in only about half of the cases (56%) measures were taken to limit pain.

For subsequent injections, only half of the healthcare personnel (48%) enquired about the pain aspect, and when they did, most did not suggest other measures to limit it (67%). Most families (73%) chose to continue treatment at home with a private nurse (63%) or with the less safe practice of the injection performed by a parent or a family member (8%). The family pediatrician was rarely involved in administering the injections (2%).

The survey highlights a need in Italy to review and reorganise this treatment approach, with the aim of limiting and managing pain, to consider setting up dedicated settings and improve information and communication. Health care institutions, regulatory authorities and prescribers should co-operate in accordance with the rights of children to receive care with as little pain and stress as possible.