

those patients who do not obtain complete relief from pain or manipulation of the foot after injection. No supportive dressings have been used other than a band-aid over the injection sites. Patients were instructed to replace their shoes which were tightly laced and observed while they walk, stoop and carry out various exercises putting the ankle into different positions. With a satisfactory injection the individual experiences immediate and complete relief of pain. It has been most interesting to observe the expression of surprise which is evidenced by the patient who after painfully limping into the Sick Bay and being injected finds it possible to resume full activity without the slightest discomfort. Patients were always advised to keep active for a period of several hours after treatment, carrying out their full duties. . . . It was always explained that after twelve hours some stiffness or discomfort might return. . . . After twenty-four hours all patients were instructed to return to the Sick Bay for re-examination. If symptoms had recurred the ankle was reinjected. . . . Excellent immediate and permanent results were observed following primary procaine infiltration in 90% of the fifty-one cases seen within 24 hours after their injury occurred." 7 references.

J. C. M. C.

HEWSON, G. F.: *Procaine Toxicity with Report of a Near Fatal Case*. Mil. Surgeon. **97**: 489-492 (Dec.) 1945.

"All pharmacologists agree that procaine is the least toxic of all drugs used in the production of local anesthesia. Thousands of injections are given yearly and reports of toxic reactions are rare. . . . The observance of a nearly fatal reaction prompted a perusal of the available literature for information on the toxicity of the drug and for case reports of toxic reactions. . . . [A] patient suffered a severe re-

action characterized by coma and convulsions following the administration of a small quantity of procaine. We do not think the solution was given intravascularly or intrathecally. Allergy was not a factor. The only conclusion we can draw is that procaine proved to be toxic when given in a normal amount to this particular patient at that particular time." 8 references.

J. C. M. C.

HESSER, F. P., AND GOLLAND, MAURICE: *The Effects of Procaine on the Inhibitory Factor of Penicillin*. Mil. Surgeon. **98**: 47-48 (Jan.) 1946.

"Many complaints have been received from patients of the painful and burning sensation upon intramuscular injections of penicillin. It has been suggested that if some anaesthetic agent could be used with the administration of penicillin, it would eliminate some of this discomfort to the patient. In this particular procedure, the penicillin solution was prepared by using a 1% sterile procaine solution instead of the usually sterile distilled water or saline. The purpose of this work was to ascertain where the procaine solution affected the inhibitory factor of the penicillin upon the growth of a particular strain of staphylococci. . . . The higher concentrations of penicillin dissolved in both distilled water and 1% procaine produce zones of inhibition practically equal in size. . . . The discrepancies in the results of the higher dilutions were probably due to inaccuracy of obtaining identical volumes in the loop emphasizing the very low dilutions." 1 reference.

J. C. M. C.

DAVIDSON, N. R.: *The Use of Sodium "Vinbarbital" in Obstetrics*. South. M. J. **38**: 790-793 (Dec.) 1945.

"Notwithstanding the great strides that have been made in medical practice and the remarkable advances along the lines of obstetrics, the alleviation of