rapidly until equilibrium is approached between the blood and all the other tissues. Nearly all the injected procaine (90 per cent on the average) is excreted in the urine, but only in the form of products of detoxication more or less equally divided between paraacetaminobenzoic acid, paraacetaminohippuric acid and paraacetaminobenzoyl glycuronate." 9 references.

J. C. M. C.

JAMES, N. R.: *Regional Analgesia: Examples of Its Advantages and Some Recent Developments.* M. Press 208: 413–416 (Dec. 23) 1942.

"Since its introduction in 1905 by Einhorn, procaine hydrochloride B. P. (syn. Novocaine, Planocaine, etc.) has held undisputed sway as the most popular analgesic drug. Today its position is being seriously threatened by its younger rival, amethocaine hydrochloride B. P. (syn. Decicain, Anethaine, Pontocaine, etc.), whose advantages are so outstanding. Not only is amethocaine hydrochloride relatively less toxic than procaine hydrochloride but it gives a more intense and infinitely longer analgesia. . . . Injecting a large amount of analgesic solution . . . is quite an arduous procedure when using an ordinary Record syringe. . . . We are now experimenting in order to produce an efficient pressure infiltrating apparatus which will be safe, robust in construction, portable, easily sterilized, etc." 4 references.

J. C. M. C.

LEINWAND, IRVING: *The Use of Local Anaesthesia in the Treatment of Sprains (or Local Tissue Injury Without Open Wounds).* Mil. Surgeon 92: 60–63 (Jan.) 1943.

"The use of local anaesthesia in the treatment of fractures has become fairly widespread due to the convenience and ease of its administration, and the absence of any postoperative effects. In more recent years it has been advocated in the treatment of certain types of fractures such as those of the radius and ulna and some fractures of the tibia and fibula. . . . A 2% procaine hydrochloride solution in distilled water was used. A 2 cc. syringe with the ordinary hypodermic needle ¾ inch length was used. . . . The area for injection is washed with soap and water, and iodine and alcohol applied. The needle is then inserted directly into the most tender area as determined at examination. . . . As much as is possible, all the infiltration is performed through this one skin puncture checking the tender areas by pressure from above, changing the position of the needle below the skin. . . . It is important that the surgeon keep drawing back the barrel of the syringe to guard against injection into the general circulation. . . . Contraindications [are] (1) An open wound. (2) An infected or potentially infected area at or near the injured area. (3) The rupture of a large or medium sized vessel. (4) Idiosynerasy to the drug. . . . It is suggested that this procedure be advocated for general use and particularly in the field or in landing forces where the materials may be incorporated in the field medical kit or hospital corps bag. This suggestion is offered as a safe and convenient aid to maintain the policy of keeping as many men at as many guns as many days as possible."

J. C. M. C.

BAKST, H. J., AND MCCORMICK, G. W.: *The Use of Local Anesthesia in the Treatment of Contusions and Sprains.* U. S. Nav. M. Bull. 41: 107–111 (Jan.) 1943.

"The demands of military necessity often require that patients be returned to a full duty status with as little loss of time as possible. . . . Any means