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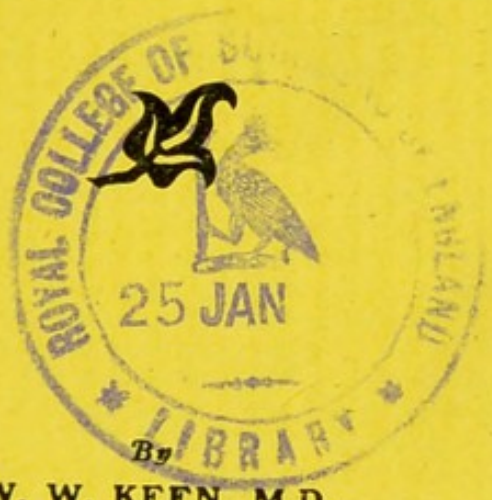

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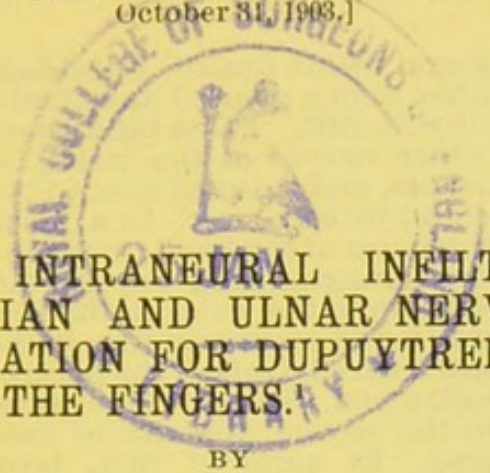

SUCCESSFUL INTRANEURAL INFILTRATION OF THE MEDIAN AND ULNAR NERVES DURING AN OPERATION FOR DUPUYTREN'S CONTRACTION OF THE FINGERS.[1]

BY

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The following case is reported to show the value of neural infiltration with cocain in a case in which general anesthesia would have been dangerous. The effects were no less gratifying to the patient than to the surgeon. The anesthesia was absolute and lasted for nearly an hour:

Miss H. N. B., aged 62, Sugartown, Pa., entered the Jefferson Medical College Hospital May 20, 1903.

Her father died of enteric fever, her mother of old age; one sister is living and well, another died of tuberculosis of the lungs; 7 other brothers and sisters are dead of unknown causes; one of her sisters has rheumatic gout.

For a number of years she has suffered with catarrhal gastroenteritis, but at no time has she been compelled to go to bed. She has also a troublesome chronic bronchitis. For the last 12 years she has had attacks of pain and stiffness involving the left shoulder, her knee, and finger-joints. She has a distinct cardiac murmur with the first sound of the heart, due to former attacks of rheumatism or gout, and she has gouty eczema. She is feeble far beyond her years, and very nervous about her heart and lungs.

About 6 years ago, without any known cause, a small lump formed on the palmar aspect of the left hand, involving the middle and ring fingers. After 3 or 4 years, contraction of the fingers began. Eight months ago, the flexion extended to the second joints, and now the tips of these fingers are almost buried in the palm of the hand. Her little finger has been flexed for several years, but there is no cord in the palm. Corresponding to the middle and ring fingers are 2 marked cords in the palm.

Urine is turbid, amber, 1.015, acid, a faint trace of albumin, no sugar, urea 1.6%. By the microscope amorphous phosphates and urates, squamous epithelium, and a few leukocytes are seen.

In view of the condition of her heart, her chronic bron-

[1] Read before the College of Physicians of Philadelphia, October 7, 1903.

chitis, and her general feeble health, I decided to use intraneural infiltration rather than a general anesthetic.

Operation.—May 23, 1903. I first infiltrated the tissues over the median and ulnar nerves at the wrist, in a few minutes exposed these 2 nerves, and injected about 12 or 15 drops of a 1% solution of cocain into each one. In a few minutes I began the operation in the palm of the hand, making 2 incisions, one from the first interphalangeal joint beyond the knuckle of the middle finger nearly up to the wrist in the line of the cord. A similar incision was made corresponding to the ring finger and its cord. The 2 contractured cords of the palmar fascia were then exposed by dissection and excised. The extension of the contracted cords onto the second phalanx of each finger was also thoroughly severed. In spite of this, however, while the knuckle-joints could be almost entirely extended, the second phalanges could not be placed entirely in a straight line, but were in nearly semiflexion. The incisions were then united by silk and the hand placed upon a straight splint which extended to the partially flexed fingers. The operation required a more than usually careful dissection, so that it lasted nearly 50 minutes. At no time did she suffer the slightest pain.

She had no rise of temperature after the operation, the sutures were removed in a week, and her fingers could be fully extended at the knuckles, but were still slightly contracted at the second joints.