

ROBERTS (J.B.)

Remarkable Case + + +

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EXTRACTED FROM THE

TRANSACTIONS OF THE COLLEGE OF PHYSICIANS OF  
PHILADELPHIA.

THIRD SERIES, VOLUME VI.

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REMARKABLE CASE  
OF  
SACCULATED OR OF CIRSOID ANEURISM OF THE  
SECOND INTEROSSEOUS BRANCH OF THE  
DEEP PALMAR ARCH TREATED  
BY EXCISION.

WITH EXHIBITION OF THE SPECIMEN.

By

— JOHN B. ROBERTS, M.D., —

LECTURER ON ANATOMY AND ON OPERATIVE SURGERY IN THE  
PHILADELPHIA SCHOOL OF ANATOMY.

[Read May 3, 1882.]

THE specimen which I exhibit this evening and its accompanying history are interesting, I think, because of the extreme rarity of the condition. I know of no similar case reported; but I have not had an opportunity to search for such in medical literature, because the operation was performed only a few hours ago. The specimen is fresh, and is exhibited now before the appearances have been changed by any preservative fluid.

Dr. Charles H. Thomas requested me a few days ago to assist him, at an early date, in operating upon a tumor of the hand in a boy aged sixteen years. From his earliest childhood he had been under Dr. Thomas's observation, and had



had a small elongated tumor upon the *dorsal* surface of the first phalanx of the left ring-finger, while in the *palm*, at the junction of the bases of the middle and ring-fingers, was a larger swelling. These were considered masses of dilated veins, as they had a spongy feel, and at times showed a bluish color. There was no very definite connecting band of swelling between the dorsal and palmar enlargements. No special pain was experienced unless the parts were struck, and no marked growth occurred. Hence the child's mother was advised to have nothing done. As the boy grew, the hand and tumor increased, but held the same relative proportions. When the boy began work in a machine-shop, the skin became thickened and soiled, and the bluish tint was no longer discernible.

About two months or less ago, the growths seemed to enlarge and to be accompanied by considerable pain, and Dr. Thomas advised the use of a compress in the palm and a bandage around the finger. This the boy wore at nights, and usually from Saturday to Monday morning when he returned to his work. Recently there was noticed pulsation in the palmar tumor and a lobulated feel; and Dr. Thomas feared that an arterial aneurism existed.

When I examined the boy last evening, I found on the back of the third finger a hard fibrous-like tumor, as large as a watermelon seed, with the long diameter corresponding to the length of the phalanx. In the palm was an illy defined swelling covered with thick skin, very sensitive to pressure, and occupying about the area of a silver half-dollar. No swelling was evident connecting the two tumors. On the ulnar side of the palmar mass moderately distinct pulsation could be felt, which quickly stopped when the radial artery was compressed at the wrist, but merely decreased in force when the ulnar was pressed upon with the finger. No pulsation was felt in the dorsal tumor.

The boy had severe pain even when no pressure was made upon the growth in the palm.

I gave it as my opinion that the growth was an arterial angioma connected with the second interosseous branch of the deep palmar arch, having anastomoses with the digital branches of the ulnar artery. Dr. Thomas considered it possibly this, but probably a sacculated aneurism. His diagnosis has proved to be the more correct.

It was determined to employ the Esmarch elastic bandage, and to make a free incision over the tumor and dissect it out, whether it be angioma or aneurism. As Dr. Thomas was disabled by a painful boil on his right hand, he requested me to operate. The boy was etherized and the elastic bandage applied.

I made an incision from a point a little in front of the superficial palmar arch to the commissure of the fingers, and came upon a mass of fat and small vessels, in the centre of which was a bluish nodule, resembling larger vessels containing blood not driven out by the elastic bandage. Keeping close to the skin, and going down to the sheaths of the flexor tendons, I dissected the mass free. Lying alongside of the palmar interosseous muscle going to the ring-finger (2d interosseous) we saw a comparatively large vessel which seemed to be the main feeder of the mass. I then extended my incision, making a straight cut along the side of the ring-finger, dissected up the skin, and enucleated the hard nodule lying on the back of the first phalanx. This seemed connected with the other mass by some fibres or small vessels, and both were removed as one piece. The wound was then plugged with dry muslin to stop the general oozing that occurred after removal of the bandage, and a tight bandage applied. No ligatures were required, because my incisions were made at a distance from the tumor.

Dissection of the palmar mass showed that I had removed a small body, about three-quarters of an inch in

diameter, containing clotted blood, and surrounded by adipose tissue and nerves. The tumor, when freed from other structures, as is seen on the table, consists of three lobules of rather unequal size, arranged somewhat as a trefoil. The largest one of them, which has been punctured, allows the escape of soft clot; this sac is about one-half an inch in diameter. The three sacs seem to be separate, because the head of a pin introduced into one does not pass into the others. The two smaller sacs or lobules are hard, as if the clot was old. One has been laid open, and shows a white centre, or nucleus, of cartilaginous consistence, surrounded by a layer of red clot. On the surface of this three-lobed tumor runs a nerve, which probably was the seat of pain from pressure, and parallel to it a small artery. Both of these become lost in the mass, at the upper end of the tumor, which was thought to contain the main supply of the aneurism, and around which a string was tied and left for identification.

The tumor from the back of the finger is hard, and on section shows an irregularly colored red surface. I believe the tumors, therefore, to be small sacculated aneurisms evidently allied to or identical with the variety called cirroid aneurism. The one on the back of the finger and the two smaller lobules in the palm are undergoing cure by coagulation, induced in the dorsal one undoubtedly by the pressure from the bandage used at intervals during the last six weeks or two months.

If the diagnosis had been more certain as to aneurism, I believe that digital compression of the radial and ulnar arteries, or the use of an Esmarch elastic

bandage to the forearm, would have been proper treatment before excision was attempted.

The early period of life (about three years) at which the trouble was noticed primarily, renders it probable that the aneurisms were not originally traumatic.

The similarity to cirroid aneurism is certainly very great, though there are some points which differ somewhat from the usual clinical history of these growths.

Two weeks after the operation the wound was closing satisfactorily by granulations.



[After the reading of the preceding paper:—]

Dr. W. W. KEEN called attention to the danger of using coagulating agents in such cases, and spoke of a case of traumatic origin he had seen in consultation, in which a few drops of Monsell's solution had been injected into the aneurismal sac, and gangrene had followed, necessitating amputation of the hand. He thought compression of the radial and ulnar arteries would probably have accomplished a cure, and the risks of an operation would have been avoided. With regard to the small tumor on the dorsal surface of the ring finger, he thought it unlikely to be an aneurism. Nothing short of a microscopical examination would determine its nature.





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