

June 25, 1942.

Mr. George Trombold,
Personnel Director,
Boeing Airplane Company,
Wichita, Kansas.

Dear George:

As I promised you, I am writing concerning Joe Gullledge's shoulder. As I told you yesterday, the nerve supply is from the fifth and sixth cervicle. It is the axillary nerve; the old terminology is circumflex. I would suggest that one who is well acquainted with manipulation of the neck give a good deal of attention to the fifth and sixth cervicle nerves as they rise from that origin in the spinal cord.

This will be helpful, but I am of the opinion that the diathermy machine with manipulation would be much more beneficial. The teres minor muscle arises from the axillary border of the scapula in its upper third and is inserted into a facet on the greater tuberosity of the humerus - the distal facet. Now this is the important thing, George, to have these electrodes placed one on the bicipital groove of the humerus and the other on the distal facet on the opposite side of the humerus.

The reason that the pain is reflected so often to the bicipital groove is due to the shortening of the teres minor insertion. This pulls the head of the humerus in and back and does not give full movement of the head of the humerus, so that much of the pain is reflected to the bicipital groove or intertubercularis sulcus. That is why so much of the pain is in the front of the shoulder, while the real injury is in the back.

After 15 or 20 minutes of the diathermy a good manipulation of the cervicle region and the neck, plus a stretching movement that you saw me employ on Joe Gullege yesterday, will be very beneficial. You will remember that he was lying on his left side facing me. His thighs were flexed on the table, the thigh being used as an anchor to keep from pulling the body forward. My left hand was placed on his axillary border of the scapula with the heel of my hand located at the inferior angle. His right forearm was intertwined in my right forearm, and his