



Incidence of third head of biceps brachii muscles

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ABSTRACT

This study shows the incidence of extra head of Biceps Brachii which was found during routine dissection by the first year students of MBBS at Sri Devraj Urs Medical College, Tamaka, Kolar, Karnataka (State), India.

Keywords: Biceps; Third Head; Coracoid Process.

INTRODUCTION

Normally biceps brachii arises from scapula by two heads, that is, long head and short head. Short head arises from the tip of the coracoid process and long head arises from supra glenoid tubercle; both heads fuse together and form a common single belly getting inserted into the posterior part of radial tuberosity.

But the present study shows the third head of biceps in both the upper limbs of the same body. In the left arm the third head is showing a short belly with a long tendon whereas in the right arm the third head is

showing a long fleshy belly. In both the upper limbs, third heads are having common origin and insertion with no vessels and nerves entangled. Hence this case has been reported.

The above specimens were found during routine dissection by the first year students of Sri Devaraj Urs Medical College in early part of 1998.

METHODS AND MATERIAL

The above study was done in 20 upper limbs during routine dissection by the 1st year students. Out of 20, the upper limbs of the

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same body showed additional third head of biceps brachii. Of them, in one arm it had short muscle belly with a long tendon and in the other arm, it had a long fleshy belly. The above specimens were carefully dissected under water, variations were noted, dried well, numbered and third head of biceps in both were lifted and kept over forceps and photographed.

OBSERVATION

In the left arm the third head was partly tendinous and partly fleshy in the lower part arising from brachialis muscle. No vessels and nerves were entangled between the muscle heads. The third head inserted the bicipital aponeurosis along with short and long heads.

In the right arm, the third head arose from brachialis muscle, which was fully fleshy throughout, and inserted the bicipital aponeurosis on its medial side. Here also no vessels and nerves are entangled between the muscle heads. The other two heads have normal origins and insertions.

Fig. 1: Photograph showing left arm, here the third head is showing a short belly with a long tendon



Fig. 2: Photograph showing right arm, here the third head is showing a short long fleshy belly

DISCUSSION

According to Henry Gray, "The third head of biceps occurs in 10 percent of cases arising on the upper and medial part of brachialis with which it is blended and attached to bicipital aponeurosis and medial side of the tendon of the muscle. In some cases, there are two slips, one passing in front of the brachial artery and the other behind the brachial artery. Very rarely slips may arise from the lateral aspect of humerus or inter tubercular sulcus."

Cunningham noted the third head arising at the insertion of coraco brachialis passes into the bicipital aponeurosis on the medial side of the main belly of this muscle.

In the present study, the third head is arising from brachialis muscle bilaterally but differ in their bulk of muscle. In the left arm, it is partly fleshy and partly tendinous. In the right arm, it is fleshy throughout. Both

inserted the bicipital aponeurosis on its medial side. No arteries and nerves are entangled between heads because the third head has a single belly.

CONCLUSION

This study helps us to know the variations in the origin and insertion of the third head of biceps brachii. In these specimens, no vessels and nerves were entangled because the third head arose from the single belly in both arms.

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