

Unusual High Origin and Superficial Course of Radial Artery: A Case Report with Embryological Explanation

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Abstract : During routine cadaveric dissection at gross anatomy lab of our institution, a radial artery was found with unusual origin and superficial course. Normally the radial artery takes its origin as one of the terminal branches of brachial artery at the level of the neck of radius. It usually lies along the lateral border of fore arm deep to the brachioradialis muscle. While dissecting a 72-year-old Caucasian female cadaver, it was found that the right sided radial artery originated from the upper part of brachial artery of arm, 2 cm below the lower border of teres major muscle, from the lateral aspect of brachial artery. Then the radial artery superficially crossed the brachial artery and median nerve from lateral to medial direction and rested superficially at the cubital fossa. Embryologically, it can be explained as a failure of disappearance, or abnormal persistence of some insignificant embryonic vessels may give rise to this kind of vascular anomalies. As radial artery is one of the most important upper limb arteries, its variation and related complications are clinically significant. This unusual origin and course of radial artery should be kept in mind by all healthcare providers including surgeons and radiologists during routine venipuncture, orthopedic and plastic surgeries of arm, coronary angiographic procedures in radial approach etc. to prevent unwanted complications.

Keywords : brachial artery anomalies, brachio-radial artery, high origin radial artery, superficial radial artery

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