

Unilateral duplication of palmar arterial arches - a case report

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SUMMARY

Recent progress in hand surgery has engendered a need for precise knowledge of anatomical variations of blood supply of hand. The present paper describes an unusual organization of palmar arterial arches and attempts to discuss its clinical implications. Double superficial palmar arch of the mediano-ulnar variant was observed with a double deep palmar arch of equal caliber, formed by splitting of deep branches of radial artery and ulnar artery. The superficial palmar branch of radial artery was absent.

INTRODUCTION

The knowledge of variations of arterial anatomy of hand is important for the present day vascular surgeon while performing reconstructive procedures in the hand region. The radial artery (RA) is a frequent site for introducing catheter for arterial pressure monitoring or to create arteriovenous fistulae (Little, 1973). Furthermore, the artery has also been used as an alternative for myocardial revascularization (Acar et al., 1992). Such techniques are not without risk as they could cause necrosis in different parts of the hand or potential damage to the blood supply of the forearm and hand.

MATERIAL AND METHOD

An unusual pattern in palmar arterial arches was detected in the left upper extremity of a 45 year old formalin fixed cadaver during routine undergraduate educational training programme. The morphological details of the palmar arterial