

investigated gross anatomical patterns between them in the present study.

【Materials and methods】 The arteries in the transverse mesocolon were dissected in cadavers. The relative position of the arteries to the transverse colon was recorded.

【Results】 In the right half of the transverse mesocolon, there was no regularity in the arteries' routes because they ran close and/or far from the colon. On the other hand, an artery intimately ran along the colon as the marginal artery in the left half, resulting in a space without arteries at the inner area. Besides, there are some cases with arterial variations, crossing the space in the left half.

【Discussion】 The vacant space of blood vessels in the transverse mesocolon depends on the route of the middle colic artery (MCA) and some variations. The common space was not determined in the right half, possibly due to no regular route of the MCA. On the other hand, the typical course of the marginal artery contributes to the formation of vacant space in the left half unless there are no variations.

6-4.

Relationship between the changes of body composition and recovery of muscle after total knee arthroplasty

(社会人大学院博士課程4年整形外科)

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※抄録の掲載を辞退する。

6-5.

Differences in longitudinal associations of cardiovascular risk factors with arterial stiffness and pressure wave reflection in middle-aged Japanese men

(大学病院：循環器内科学)

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山科 章

The present prospective observational study was conducted to examine the differences in longitudinal associations of the conventional risk factors for cardiovascular disease (CVD) with arterial stiffness and with abnormal pressure wave reflection. In 4,016 healthy middle-aged (43 ± 9 years) Japanese men without CVD at baseline, the conventional risk factors for CVD, brachial-ankle pulse wave velocity (baPWV) and radial augmentation index (rAI) were measured annually over a 9-year period. Mixed-model linear regression analysis demonstrated a significant independent positive longitudinal association of the mean blood pressure with both the baPWV (estimate = 5.51, standard error = 0.30, $P < 0.01$) and the rAI (estimate = 0.19, standard error = 0.02, $P < 0.01$). On the other hand, the serum levels of glycohemoglobin, low-density lipoprotein cholesterol and triglycerides showed longitudinal associations only with the baPWV and not the rAI. In addition, while the rAI was found to show a significant longitudinal association with the baPWV. In conclusion, the conventional risk factors for CVD showed heterogeneous longitudinal associations with arterial stiffness and/or abnormal pressure wave reflection. Elevated BP showed independent longitudinal associations with both arterial stiffness and abnormal pressure wave reflection, suggesting that BP is longitudinally associated with microvascular damage. On the other hand, abnormal glucose metabolism and dyslipidemia showed independent longitudinal associations with only arterial stiffness (macrovascular damage).