MAIN ARTERIES IN THE NECK AND THORAX OF *ORIOLUS CHINENSIS DIFFUSUS* SHARPE

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INTRODUCTION

As in other passerine birds, *Oriolus* is typically "aves laevo-carotidinae." A single specimen of *Oriolus chinensis diffusus* Sharpe was available for study. This material was sent to the writer by Professor Tsen-Hwang Shaw, Fan Memorial Institute of Biology, in 1940, and was collected near Peiping, China. The following observations are based, therefore, upon the arrangement of the arteries in the neck and thorax of but one specimen.

OBSERVATIONS

The systemic (right 4th aortic) arch (3) arises from the base of the right innominate artery (2) and joins the right radix aortae (4) which passes posteriorly to join the dorsal aorta (8). At this point, the ligamentum aortae (5) has its distal attachment. The ligamentum aortae is prominent in the adult bird, and maintains its proximal attachment to the pulmonary artery (6). The ligamentum botalli remains as a ligamentous 'button' (7) on the ventral face of the right radix aortae near its base; the rest of the ligament atrophies or fuses with the fascia surrounding the radix.

Anteriorly the innominate divides to form the subclavian (10) and common carotid (9) arteries which then send off several branches.

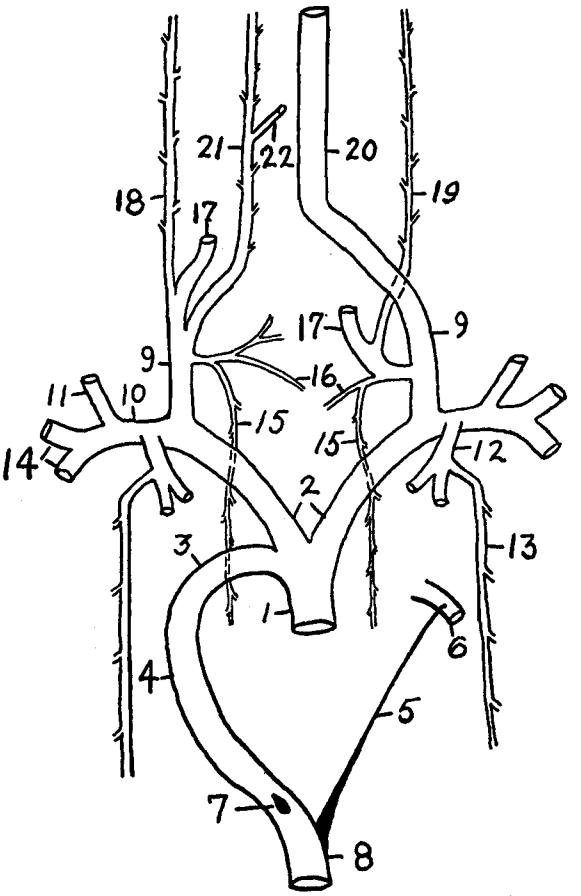
The coracoid major (12), axillary (11), and two pectoral (14) arteries arise from the subclavian artery in order. The intercostal artery (13) arises as a branch of the coracoid major.

The right common carotid artery gives rise to the ductus shawi (15), vertebral (17), and ascending-oesophageal (right internal carotid) (21) arteries. The left common carotid gives rise to the vertebral (17) and left internal carotid (trunk) (20) arteries. The left superficial cervical (19) arises as a branch of the vertebral, as does the left ductus shawi. Both left and right ductus shawi (15) give rise to syringo-tracheal branches (16). The right superficial cervical artery (18) arises from the right vertebral near its origin. A single vessel *arteria furcula-collis ventralis* (22) arises from the ascending-oesophageal artery (21) and supplies the tissues in the region of the furcula and at the base of the neck.

DISCUSSION

The significance of the arrangement of the arteries in *Oriolus* cannot be determined at the present time. Only after a larger series of dis-

sections on other species has been completed and comparisons made can we draw anyway near satisfactory conclusions with regard to the significance of the present findings. The present information may serve merely as a guide to further studies on other members of this family of birds.



TEXT-FIGURE 1.—Main arteries in the region of the neck and thorax of *Oriolus chinensis diffusus;* ventral view.

KEY TO ABBREVIATIONS

1, aortic root; 2, innominate arteries; 3, right systemic arch; 4, right radix aortae; 5, ligamentum aortae; 6, pulmonary artery; 7, ligamentum botalli (button); 8, dorsal aorta; 9, common carotid artery; 10, subclavian artery; 11, axillary artery; 12, coracoid major artery; 13, intercostal artery; 14, pectoral arteries; 15, ductus shawi; 16, syringo-tracheal artery; 17, vertebral artery; 18, right superficial cervical artery; 19, left superficial cervical artery; 20, left internal carotid (trunk) artery; 21, ascending-oesophageal (right internal carotid) artery; 22, arteria furcula-collis ventralis.

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