Supplemental Digital Content 2. Cerebral angiogram of a Japanese monkey.



Many animal species used in laboratories such as cats, dogs, pigs, sheep and goats have a vascular structure called carotid rete that branches like capillaries at the skull base to cool arterial blood by exchanging heat with venous blood. These animals can decrease brain temperature by panting without sweating and have adapted to a dry environment during evolution. Japanese monkeys do not have a carotid rete. The arrows indicate the internal carotid artery. The hollow arrow indicates the skull base. This angiogram is provided by courtesy of Dr. Itaru Yoshii, Department of Anatomy Kawasaki Medical School.