Orbitofrontal artery

Orbitofrontal artery is one of the branches of the anterior cerebral artery.

The orbitofrontal artery is usually the first cortical branch of the A2 segment, arising from the subcallosal segment to supply the inferior and inferomedial surfaces of the frontal lobe including the gyri recti.

The orbitofrontal artery was present in 90% (45/50) of the cases on the right hemisphere and 92% (46/50) on the left hemisphere; in 26 cases (52%) on the right side and 34 cases (68%) on the opposite side, the artery arose between anterior communicating and frontopolar arteries; in 19 cases (38%) on the right side and 12 cases (24%) on the left side the vessel was not the classical first branch of the postcommunical segment of the anterior cerebral artery, it arose between the Heubner artery and the frontopolar artery. With regard at filogenetic signification of the orbitofrontal artery it has been formulated the hypothesis that the artery is homologous to posterior and anterior orbital branches of the anterior cerebral artery described by Watts in sub-human primates [1].

1)
Lemos VP, Medeiros MM, De Carvalho RC. [Neuroanatomical study of the orbitofrontal branch of the anterior cerebral artery in human brains]. Arq Neuropsiquiatr. 1984 Mar;42(1):9-13. Portuguese. PubMed PMID: 6732539.