783

ARCHAIC POSTCRANIUM OF MIDDLE MIOCENE APES AND PARALLEL EVOLUTION OF MODERN POSTCRANIAL ANATOMY IN EXTANT APES

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From the late Early to early Middle Miocene (17-14 Ma), several large-sized hominoids are established in Afro-Arabia and Eastern/Central Europe (e.g. *Afropithecus*, *Kenyapithecus*, *Equatorius*, *Nacholapithecus*, *Heliopithecus*, *Griphopithecus*). This group (particularly *Kenyapithecus*) has accumulated derived craniodental features toward the living great apes' condition compared to the Early Miocene stem hominoids such as *Proconsul*. In the conventional view, which is largely based on cranial and dental morphologies, these fossil apes have been regarded to reflect the evolutionary trend leading to the extant hominoids even if they were not directly ancestral to them. If this is the case, their "archaic" postcranial morphology (more or less resembling *Proconsul*) coupled with estimated divergent times of extant apes suggests that the "modern" (or advanced) postcranial anatomy of extant apes (e.g., wide thorax, short and stiff lumbar) is not a shared-derived one, but a result of homoplasy. This view has been criticized by researchers which see some aspect of modern postcranial anatomy has already been established in Early Miocene as is inferred from the *Morotopithecus* lumbar spine This paper reviews this controversy and presents evidences favoring parallel evolution of "modern" postcranial anatomy in extant apes.

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