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New Postcranial Hominin Fossils from the Central Narmada Valley, India

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Author(s)

Anek R. Sankhyan, Giani L. Badam, Laxmi N. Dewangan, Sheuli Chakraborty, Shashi Prabha, Suvendu Kundu, Rana Chakravarty

ABSTRACT

Hathnora in Central Narmada valley (Madhya Pradesh) has earlier yielded a partial skullcap, and two clavicles and a 9th rib of Middle Pleistocene hominin. Recent explorations have brought to light two more human fossils—a humerus and a femur from a new locality, Netankheri. The femur is derived from the Middle Pleistocene stratigraphic horizon as the Hathnora skullcap, and shares similar “archaic” mosaic morphology of *Homo heidelbergensis*, also attested by new bio-stratigraphic and Palaeolithic data. The humerus is derived from the pre-YTA (~75 Kya) Upper Pleistocene strata in association with unique fossilized bone artifacts and documents the early emergence of anatomically modern *Homo sapiens* in South Asia.

KEYWORDS

Pleistocene; Hominins; Narmada Valley; Humerus; Femur; H. Erectus; H. Sapiens; H. Homo Heidelbergensis

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References

- [1] Acharyya, S. K., & Basu, P. K. (1993). Toba ash on the Indian subcontinent and its implications for the correlation of Late Pleistocene Alluvium. *Quaternary Research*, 40, 10-19. doi:10.1006/qres.1993.1051
- [2] Angel, J. L. (1972). A middle Paleolithic temporal bone from Darra-Ikur, Afghanistan. In L. Dupree (Ed.), *Prehistoric research in Afghanistan (1959-1966)*. Transactions of American Philosophical Society, 62, 54-56.
- [3] Athreya, S. (2007). Was *Homo heidelbergensis* in South Asia? A test using the Narmada fossil from central India. In M. D. Petraglia, & B. Allchin (Eds.), *The evolution and history of human populations in South Asia* (pp. 137-170). New York: Springer Press. doi:10.1007/1-4020-5562-5_7
- [4] Badam, G. L., Ganjoo, R. K., Salahuddin, M., & Rajaguru, S. N. (1986). Evaluation of fossil hominin—The maker of Late Acheulean tools at Hathnora, Madhya Pradesh, India. *Current Science*, 55, 143-145.
- [5] Badam, G. L. & Sankhyan, A. R. (2009). Evolutionary trends in Narmada fossil fauna. In A. R. Sankhyan (Ed.), *Asian perspectives on human evolution* (pp. 92-102). New Delhi: Serials Publications.
- [6] Barik, S.S., Sahani, R., Prasad, B.V.R., Endicott, P. et al. (2008). Detailed mtDNA genotypes permit a reassessment of the settlement and population structure of the Andaman Islands. *American Journal of Physical Anthropology*, 136, 19-27. doi:10.1002/ajpa.20773

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- [7] Bermudez de Castro J. M., Carretero, J. M., Garc?a-Gonzalez R, Rodriguez-Garc?a, L., Martinon-Torres, M., Rosell, J., Blasco, R., Mart?nFrances, L., Modesto, M., & Carbonell, E. (2012). Early pleistocene human humeri from the gran dolina-TD6 site (Sierra de Atapuerca, Spain). *American Journal of Physical Anthropology*, 147, 604-617. doi:10.1002/ajpa.22020
- [8] Cameron, D., Patnaik, R., & Sahni, A. (2004). The phylogenetic significance of the Middle Pleistocene Narmada hominin cranium from central India. *International Journal of Osteoarchaeology*, 14, 419447. doi:10.1002/oa.725
- [9] Carretero, J. M., Haile-Selassie, Y., Rodríguez, R., & Arsuaga, J. L. (2009). A partial distal humerus from the Middle Pleistocene deposits at Bodo, middle awash, Ethiopia. *Anthropological Science*, 117, 19-31. doi:10.1537/ase.070413
- [10] Chandrasekar, A., Kumar, S., Sreenath, J. et al. (2009). Updating phylogeny of mitochondrial DNA macrohaplogroup M in India: Dispersal of modern human in South Asian Corridor. *PLoS ONE*, 4, 1-13. doi:10.1371/journal.pone.0007447
- [11] Chesner, C. A., Rose, W. I., Drake, A. D. R., & Westgate, J. A. (1991). Eruptive history of earth's largest quaternary caldera (Toba, Indonesia) clarified. *Geology*, 19, 200-203. doi:10.1130/0091-7613(1991)019<0200:EHOESL>2.3.CO;2
- [12] Churchill, S. E. (2007). Endocrine models of skeletal robusticity and the origins of gracility. In A. R. Sankhyan, & V. R. Rao (Eds.), *Human origins, genome and people of India* (pp. 337-368). New Delhi: Allied Publishers.
- [13] Ganjoo, R. K., Rajaguru, S. N., & Gupta, A. (1996). On the problem of age and genesis of Bhedaghath waterfalls (Jabalpur), Madhya Pradesh, *Journal Geological Society of India*, 48, 421-425.
- [14] Van Heteren, A. H., & Sankhyan, A. R. (2009). Hobbits and Pygmies: Trends in evolution. In A. R. Sankhyan (Ed.), *Asian perspectives on human evolution* (pp. 172-187). New Delhi: Serials Publications.
- [15] James, H. V. A., & Petraglia, M. D. (2005). Modern human origins and the evolution of behavior in the later pleistocene record of South Asia. *Current Anthropology*, 46, 3-27. doi:10.1086/444365
- [16] Kennedy, K. A. R. (2000). God-apes and fossil men: The paleoanthropology of South Asia. Michigan: The University of Michigan Press.
- [17] Kennedy, K. A. R. (2007). The Narmada fossil hominid. In A. R. Sankhyan, & V. R. Rao (Eds.), *Human origins, genome and people of India* (pp. 188-192). New Delhi: Allied Publishers.
- [18] Kennedy, K. A. R., & Deraniyagala, S. U. (1989). Fossil remains of 28,000 year old hominids from Sri Lanka. *Current Anthropology*, 30, 394-399. doi:10.1086/203757
- [19] Kennedy, K. A. R., Sonakia, A., Chiment, J., & Verma, K. K. (1991). Is the Narmada hominin an Indian Homo erectus? *American Journal of Physical Anthropology*, 86, 475-496. doi:10.1002/ajpa.1330860404
- [20] Khan, A., & Sonakia, A. (1992). Quaternary deposits of Narmada with special reference to the hominid fossil. *Journal of the Geological Society of India*, 39, 147-154.
- [21] De Lumley, H., & Sonakia, A. (1985). Contexte stratigraphique et Archéologique de L' Homme de le Narmada, Hathnora, Madhya Pradesh, Inde. *L' Anthropologie*, 89, 3-12.
- [22] Lumley, M. A., & Sonakia, A. (1985). Première Découverte D' un Homo erectus Sur Le Continent Indien a Hathnora, Dans la Moyenne vallée de la Narmada. *L' Anthropologie*, 89, 13-61.
- [23] Mallasse, A. D. (2009). Cranial embryogeny and hominin phylogeny. In A. R. Sankhyan (Ed.), *Asian perspectives on human evolution* (pp. 103-121). New Delhi: Serials Publications.
- [24] Oppenheimer, C. (2002). Limited global change due to largest known Quaternary eruption, Toba ~74 Kyr BP. *Quaternary Science Review*, 21, 1593-1609. doi:10.1016/S0277-3791(01)00154-8
- [25] Oppenheimer, C. (2003). Ice core and palaeoclimatic evidence for the great volcanic eruption of 1257. *International Journal of Climatology*, 23, 417-426. doi:10.1002/joc.891
- [26] Patnaik, R., Chauhan, P. R, Rao, M. R., Blackwell, B. A. B, Skinner, A. R, Sahni, A., Chauhan, M. S., & Khan, H. S. (2009). New geochronological, paleoclimatological and Paleolithic data from the Narmada Valley hominin locality, Central India. *Journal of Human Evolution*, 56, 114-133. doi:10.1016/j.jhevol.2008.08.023

- [27] Pearson, O. M. (2000). Activity, climate and postcranial robusticity: Implications for modern human origins and scenarios of adaptive change. *Current Anthropology*, 41, 569-605. doi:10.1086/317382
- [28] Petraglia, M. D., & Alsharekh, A. (2003). The middle paleolithic of Arabia: Implications for modern human origins, behaviour and dispersals. *Research* (Online).
- [29] Petraglia, M. D. (2007). Middle paleolithic assemblages from the Indian Subcontinent before and after the Toba Super-Eruption. *Science*, 317, 114-116. doi:10.1126/science.1141564
- [30] Rose, W. I. & Chesner, C. A. (1990). Worldwide dispersal of ash and gases from earth's largest known eruption: Toba, Sumatra, 75 Ka. *Palaeogeography, Palaeo-climatology, Palaeoecology*, 89, 269-275. doi:10.1016/0031-0182(90)90068-I
- [31] Sankhyan, A. R. (1997a). Fossil clavicle of a Middle Pleistocene hominid from the Central Narmada Valley, India. *Journal of Human Evolution*, 32, 3-16. doi:10.1006/jhev.1996.0117
- [32] Sankhyan, A. R. (1997b). A new human fossil find from the Central Narmada basin and its chronology. *Current Science*, 73, 1110-1111.
- [33] Sankhyan, A. R. (1999). The place of Narmada hominin in the Jigsaw puzzle of human origins. *Gondwana Geological Magazine Special Publication*, 4, 335-345.
- [34] Sankhyan, A. R., (2005). New fossils of Early Stone Age man from Central Narmada Valley. *Current Science*, 88, 704-707.
- [35] Sankhyan, A. R. (2006). On the status of Indian hominoid and hominid fossils. In R. Ray, & V. Jayaswal (Eds.), *Status of Prehistoric Studies in the 21st Century in India, Proceedings of 15th UISPP Congress*, Lisbon, BAR International Series 1924 (pp. 13-23), Oxford: Archaeo Press.
- [36] Sankhyan, A. R. (2010). Pleistocene Hominins & associated findings from central Narmada Valley bearing on the evolution of man in South Asia. Ph.D. Thesis, Chandigarh: Panjab University.
- [37] Sankhyan, A. R. & Rao, V. R. (2007). Did ancestors of the Pygmy or Hobbit ever live in Indian heartland? In E. Indriati (Ed.), *Recent advances on Southeast Asian paleoanthropology and archeology* (pp. 76-89). Yogyakarta: Gadjah Mada University.
- [38] Sankhyan, A. R., Dewangan, L. N., Sahoo, R. H., Chakravarty, R., & Chatterjee, R. (2011). Early prehistoric signatures of man in Bastar region, Central India. *Current Science*, 101, 1146-1149.