The Interatheriinae notoungulates from the middle Miocene Collón Curá Formation in Argentina

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The Interatheriinae (Notoungulata, Interatheriidae) from the Collón Curá Formation (Colloncuran South American Land Mammal Age, SALMA) are revised here, based on old and new collections from western Neuquén, Río Negro, and Chubut provinces where this geologic unit crops out. After a detailed study of the holotype of Icochilus endiadys, we conclude that its cranial and dental morphology are diagnostic of the genus Protypotherium, and as a result we include I. endiadys in this genus (P. endiadys comb. nov.). Deciduous dentition and postcranial remains are also ascribed to P. endiadys, which allows us to determine its pattern of dental eruption and describe part of its limbs, expanding its diagnosis. In addition, we describe a new species of Protypotherium, P. colloncurensis sp. nov., which differs from P. endiadys in having larger size, a more robust mandible, strongly imbricate upper molars, a well-developed parastyle on P1, a subcircular and non-overlapping p1, a much reduced p2, and a smaller talonid on p3–4. Based on the revision, we identified only one genus of Interatheriinae in the Collón Curá Formation (i.e., Protypotherium). Protypotherium endiadys extends its distribution from Neuquén to Chubut provinces, including Río Negro; the new species, in turn, was only recognized in Río Negro Province, appearing together with P. endiadys in Estancia El Criado, Comallo, and Chico River localities. Discriminant and cladistic analyses were performed including P. endiadys, the new taxon, and other middle Miocene interatheres, and yielded strong support for our systematic conclusions. A thorough phylogenetic analysis of Protypotherium is provided for the first time. Based on this analysis, Protypotherium and Miocochilus form a monophyletic group supported by four synapomorphies.

Key words: Mammalia, Notoungulata, Interatheriidae, Neogene, South America, Patagonia, Argentina.

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