A small collection of ?Aptian or ?Albian amphilestid (`triconodont') mammals consisting of incomplete dentaries and maxillae with teeth, from the Khoboor locality, Guchin Us county in Mongolia, is described. Guchinodon Trofimov, 1978 is regarded a junior subjective synonym of Gobiconodon Trofimov, 1978. Heavier wear of the molariforms M3 and M4 than of the more anterior one - M2 in Gobiconodon borissiaki gives indirect evidence for molariform replacement in this taxon. The interlocking mechanism between lower molariforms in Gobiconodon is of the pattern seen in Kuehneotherium and Tinodon. The interlocking mechanism and the type of occlusion ally Amphilestidae with Kuehneotheriidae, from which they differ in having lower molariforms with main cusps aligned and the dentary-squamosal jaw joint (double jaw joint in Kuehneotheriidae). The main cusps in upper molariforms M3-M5 of Gobiconodon, however, show incipient triangular arrangement. The paper gives some support to Mills' idea on the therian affinities of the Amphilestidae, although it cannot be excluded that the characters that unite the two groups developed in parallel. Because of scanty material and ambiguity, we assign the Amphilestidae to order incertae sedis.

Key words: Mammalia, `triconodonts', Amphilestidae, Kuehneotheriidae, Early Cretaceous, Mongolia.