A new pliosaurid from the Pliensbachian, Early Jurassic of Normandy, Northern France

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Complete plesiosaur skeletons are relatively abundant in the Lower Jurassic of England and Germany, but are exceptional in France. A new specimen from Normandy (northern France), including incomplete skull, palate and mandible with several associated vertebrae, is here described and its pliosauroid affinities are discussed. Comparison of this new specimen with other plesiosaurians indicates that it belongs to a new genus and species: Cryonectes neustriacus. This new plesiosaurian taxon represents one of the most complete pliosaurids reported from the Pliensbachian, a stage that has yielded very few diagnostic plesiosaurian remains. Our preliminary phylogenetic analysis places Cryonectes in a basal position among Pliosauridae, and suggests that the radiation of this clade occurred several millions of years earlier than previously thought. This new taxon contributes to our understanding of Early Jurassic plesiosaur diversity.

Key words: Reptilia, Plesiosauria, Pliosauroidea, Cryonectes, Jurassic, Pliensbachian, France.

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