A new microconchid tubeworm from the Artinskian (Lower Permian) of central Texas, USA

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Calcareous tubeworms are common in the Artinskian (Lower Permian) shale and limestone rocks of the Wichita–Albany Group in central Texas. In some units they form small reefs of budding tubes spreading outward from a common origin. These tubular fossils have been traditionally referred to as serpulids, but here we identify them as microconchids (*Helicoconchus elongatus* gen. et sp. nov.) These microconchids are unusual because of their greatly elongated impunctate tubes with centrally pitted diaphragms. They also show two types of budding: lateral with small daughter tubes that begin as small coils, and binary fission that produced two daughter tubes of equal diameters. These microconchids flourished in shallow marine environments with a fauna dominated by mollusks, echinoids, and foraminifera.

Key words: Tentaculita, Microconchida, reefs, Permian, Texas.

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