

Role of microglia in embryonic neurogenesis

ABSTRACT

Microglia begin colonizing the developing brain as early as embryonic day 9, prior to the emergence of neurons and other glia. Their ontogeny is also distinct from other central nervous system cells, as they derive from yolk sac hematopoietic progenitors and not neural progenitors. In this review, we feature these unique characteristics of microglia and assess the spatiotemporal similarities between microglia colonization of the central nervous system and embryonic neurogenesis. We also infer to existing evidence for microglia function from embryonic through to postnatal neurodevelopment to postulate roles for microglia in neurogenesis.

Keyword: Microglia; Embryonic neurogenesis; Neurodevelopment