Таким образом, у крыс в слоях fascia dentata в неонатальный период в норме и после воздействия гипоксии выявлено несколько морфологически разных типов среди иммунопозитивных на ГАМК нейронов, описанных во взрослом гиппокампе.

Показано, что у контрольных животных к концу неонатального периода численность популяций всех типов ГАМКергических нейронов увеличивалась. Значительное повышение числа интернейронов, их рост в продолжении неонатального периода и существенное увеличение содержания ГАМК к концу неонатального периода выявлено у интернейронов, связанных с афферентными волокнами перфорантного и комиссурально-ассоциативнго путей. Получены дополнительные доказательства ранней дифференцировки клеток HIPP, также связанных перфорантным путем. Все это дает основание предполагать, что в это время имеет место становление связей с афферентами, приходящими в fascia dentata и межнейронных связей внутри гиппокампа. Воздействие гипоксии приводит к сокращению численности популяций разных типов интернейронов, задержке роста клеток и снижению уровня содержания ГАМК. Эти отклонения особенно выражены в популяциях клеток HICAP и HIPP, связанных с афферентными волокнами, и корзинчатых клетках, которые считаются ключевыми элементами, участвующими в осуществлении функций гиппокампа как в норме, так и патологии. Выявленные отклонения могут сказываться на структурно-функциональной организации fascia dentata в ранний неонатальный период и служить основой развития энцефалопатий новорожденных.

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