



were performed at 2,3 and 4 weeks after the transplantation. Neuroblasts from the graft could grow and differentiate into mature Purkinje cells invading the host molecular layer. During the fourth week after transplantation, the primary dendritic tree of graft Purkinje cell can be clearly identified by the Bodian stain. The quantitative data showed that the diameters of grafted Purkinje cells increased significantly and presumed the comparable adult sizes. The differentiated Purkinje cells from the graft migrate into host cerebellar cortex which had previously lost its own Purkinje cells from the toxic effect of KA. The grafted Purkinje cells could make synaptic contacts with afferent innervation, possibly the climbing fibers, from the host. The result indicated that graft Purkinje cells did not only replace the lost neurons but also integrated into damage host brain. Under proper conditions stimulated by a fresh lesion, The transplanted embryonic neurons may provide a successful mechanism to replaced the damaged neural circuit.