

## **14. Visual stimulation training in cerebral blindness due to hypoxia**

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Cerebral blindness is a rare neurological syndrome and little is known about long-term recovery. We report on JM who suffered a hypoxia which left him completely blind for three months. After 6 months of training JM could discriminate colours, localize objects and started to grasp for them, but was densely agnostic for shapes, movements, and objects. Before the treatment no VEPs were visible, but after the treatment they were normalized. SPECT showed a focal activity in the calcarine cortex when discriminating greys but diffuse activity in extrastriate areas when discriminating colours. JM therefore shows that some reorganization of visual functions is possible in complete cortical blindness, and that it takes different routes even in the same patient: residual networks for “simple” tasks and compensatory networks for complex ones.

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