Analysis of the Long Term Therapeutic Results of 58 Cases of Late Stage Repair of Median Nerve Lesion
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After traumatic lesion of peripheral nerve, if it could be instantly and properly repaired by operation, there could often be satisfactory functional recovery. However, if repair of the lesion was delay over a year, could it still be able to repair by operation? After operation could the nerve recover its function and to what extent could the function be recovered? There is no definite conclusion. The traditional authority idea was "Repairing peripheral nerve which has been injured over a year time is worthless." A long time since, great deal of wounded patients suffered life long disableness because no proper treatment is provided.

To save these vast number of patients from suffering, this institute had since 1955 broken the trammel of traditional concept, persevered in launching clinical investigation and treatment on late peripheral nerve injury. Since 1989, we have carried out some related basic research, to explore the value of repairing late peripheral nerve injuries. Clinically, we used epineurium end to end anastomosis method to repair 86 median nerve injuries with post-injury of 1-14 years. Out of these cases, 58 cases with complete long term follow-up data were obtained, with average follow-up time of 10 years and 8 months. We used the International Uniform Standard to evaluated the therapeutic efficiency of these cases, and classified the cases into: 5 excellent cases, 25 good cases, 18 acceptable cases, 10 poor cases. Excellent and good rated 51.5%. In the 18 acceptable cases, the recovery reached to the level that there were good protective sensation in all of the hands. On this basis, to some cases, palmar apposition plastic surgery was done to reestablish the hypothenar function. The functions of hands were thus markedly improved. As to basic research, we completed the experimental investigations in aniams on the degeneration and regeneration of motor end plate (MEP) in late peripheral nerve injury. Peroneal nerve of rabbits was cut and the degeneration of motor end-plate (MEP) was observed. After 9 months the nerve was reconnected and regeneration of motor-end-plate (MEP) was examined. The observation included morphological, immunohisto-chemical etc. The results indicated that MEP started to degenerate a month after sectioning of the nerve and disappeared completely after 6 months. After reconnecting the cut nerve for 3 months, MEP could be seen to regenerate, and at nine months time the newly formed MEP had morphology and function almost recovered.

Based on the above clinical and experimental investigations, it could be proved preliminarily that late median nerve injury was possible to be repaired by operation. Half of the cases could obtain excellent and good recovery. MEP degeneration and regeneration experimental investigations