행 출입이 가능하였다.

경막내 수외 종양 제거를 일측성 절개술 만으로 시행하였는데 합병증 없는 좋은 결과를 8례에서 얻었다. 습관적으로하여 온 극상 돌기와 양측 추궁 제거를 되도록 제한해야 될 것으로 믿어진다.

No. 27

상완 신경총 손상에서 자연 회복과 신경 재건술간의 비교

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비개방성 상완 신경총 손상에서 신경 재건술의 시기에 관한 일치된 의견은 없다. 저자들은 경험적으로 상완 신경총 손상 환자들에서 수상 후 8개월 후에도 자연 회복이 시작됨을 알았다. 그래서 저자들은 경험에 기초하여 비개방성 신선 손상의 치료후 수상 후 8개월까지 기다려 보았다.

1985년 1월부터 1994년 12월까지 10년간 상완 신경총 손상 103례를 경험하였다. 그들 모두 수상 후 8개월까지 어떤 수술도 시행받지 않았다. 남자 95명, 여자 8명으로 평균 나이는 29세이었다. 오토바이 사고(37%)와 자동차 사고(28%)가 주된 손상원인이었다. 상지의 전 마비는 3례(3%), 쇄골하부 병변은 15례(15%)이었다. 근전도는 모든 환자에게서 실시되었고, 회복을 발견하기 위해서 3개월마다 반복되었다. 저자들은 AMA(American Medical Association) 체계를 개량하여 상완 신경총 손상의 평가 기준으로 삼았다. 추시 기간은 평균 25개월이었다.

47명(46%)은 자연 회복을 보였는데, 근전도상 수상 후 평균 7.8개월(3-16개월)에 자연 회복의 징후로 처음 관찰되었다. 자연 회복을 보인 47명의 수정된 AMA 점수는 내원 당시 평균 15점에서 40점으로 개선되었다. 31명(30%)은 신경 이식술, 신경 전이술 및 신경박리술과 같은 신경 재건술을 시행받았다. 수상 후 신경 재건술까지의 평균 기간은 10개월이었다. 신경 재건술을 시행한 31명중 16명에서 임상적으로 호전된 소견을 보였고, 이들의 수정된 AMA 평균 점수는 술전 21.5점에서 술후 36.3점으로 개선되었다. 양군에서 회복을 보인 비율은 자연 회복군 46%와 신경 재건술군 52%로 유의한 차이가 없었으나 기능적 호전의 정도는 자연 회복군이 신경 재건술군보다 유의하게 좋았다.

자연 회복이 수상 후 평균 7.8개월에 시작됨으로, 저자들은 비개방성 상완 신경총 손상 환자에게서 자연 회복을 기대하며 1년간 기다려 본 후 1년이 경과하여도 자연 회복이 되지 않는 경우에서 수술적 치료를 시행할 것을 제안한다.

No. 26

Intradural Extramedullary Tumor Removal via Unilateral Hemilaminectomy

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Spinal intradural extramedullary tumor is to be removed via conventional total laminectomy. With microsurgical technique, however, this surgery can be performed via unilateral hemilaminectomy.

Intradural extramedullary spinal tumor is removed via unilateral approach. Lateralization is selected depending upon the findings of myelography, CT and/or MRI. Medial facetectomy is performed and the midline bone contacting dura is removed as well as ligamentum flavum. Intradural procedure, otherwise, is quite same as conventional.

Since 1994, 8 cases of tumors were removed with this method. 4 cases were cervical, 3 cases the thoracic and 1 case the lumbar. Neurofibromas was 6 cases and meningiomas 2 cases. CSF fistula and postoperative infection were not encountered. Next day of the operation, the patient was able to go to toilet without assistance.

Intradural extramedullary tumors can be removed with only unilateral hemilaminectomy without complication. Conventional total laminectomy is seemed be limited for a special occasion.

No. 27

Comparison of Spontaneous Recovery and Nerve Surgery in Brachial Plexus Injury

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There has been no general agreement about optimal time for nerve surgery in the closed brachial plexus injury(BPI). From our early experiences, we knew by chance that spontaneous recovery in BPI patients may begin even later than 8 months after injury. Authors' strategy, which was based on our early experiences, for the treatment of closed fresh injury was 'wait and see' until 8 months after injury.

From 1985 to 1994, we observed 103 patients with BPI. All of them did not have any operation until 8 months after injury. There were 95 men and 8 women with a mean age of 29 years. Motorcycle injury(37%) and vehicle accident(28%) were main causes of injury. Whole plexus types were observed in 56 patients(54%), upper plexus types in 29(28%), lower plexus types in 3(3%), and infraclavicular types in 15(15%). Electromyography was performed in all patients. This was repeated every three months to detect the recovery. Results were evaluated by

authors' criteria, in which AMA system of brachial plexus impairment was modified. Duration of follow up was average 25 months.

47 patients(46%) showed spontaneous improvement, which was initially detected at average 7.8 months(range, 3 months-16 months) after trauma by electromyography. The average score of these 47 patients improved from 14.8 points to 39.8 points. 31 patients(30%) had nerve surgery such as nerve graft, neurotization or neurolysis. Average duration from injury to nerve surgery, was 10 months. among 31 patients who had nerve surgery, 16 patients improved from preoperative 21.5 points to postoperative 36.3 points in average.

Because spontaneous recovery began in average 7.8 months after injury, we think that it would be better to wait and see' for at least one year in patients with closed BPI expecting spontaneous recovery.

No. 28

Surgical Treatment of Radial Nerve Injury

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Radial nerve injury is caused by variety of etiologies, mainly traumatic. It is primarily a motor nerve and loss of it's function leads to a significant disability. Surgical treatments of radial nerve comprise of neurolysis(internal or external), neurorrhaphy(epineural, perineural or epi-perineural), nerve graft and tendon transfer. However, there is still controversies in treatment methods and time of operation.

Authors experienced 23 cases of radial nerve injuries who were treatment by operative methods and followed up over 1 year's duration. The male to female ratio was 18 to 5 and mean age was 30.7 years old. The causes were 13 cases in fractures, 5 cases in crushing injury, 3 cases in laceration, 1 case in CO poisoning and 1 case in unknown cause.

The summary of the study were as follows;

1. Excellent or good results were obtained in overall 16 cases among 23 cases;5 of 9 cases in neurolysis, 3 of 3 cases in neurorrhaphy, 2 of 3 cases in nerve graft and 6 of 8 cases in tendon transfer.
2. In cases of neurorrhaphy and nerve graft, primary or delayed repair showed excellent or good results and neurolysis performed before 6 months leads to better results. But there was no correlations between the time of injury and operation in tendon transfer.
3. The radial nerve injury associated with extensive soft tissue defect or any conditions that leads to nerve ischemia results poor prognosis.
4. The patients aged under 40 years showed better prognosis in clinical results according to the age of surgical treatment.
5. If the surgeon decide the method and the time of operation through the exact evaluation of the factors which influencing the end result such as age of the patient, level and type of injury, extent of nerve lesion and the associated tissue injury, good result could be expected.