MANAGEMENT OF MYELOMENINGOCELE

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Abstract

Fourteen patients of myelomeningocele were seen in the surgical out-patients of Lady Reading Hospital, Peshawar during the past one year and were treated surgically. Of the 14 patients eight made satisfactory recovery and have since been followed for 4 to 8 months. There were two deaths, one during operation from CSF leak and possible coning of the mid brain while the other died of post operative CSF leakage and pulmonary infection.

Introduction

Myelomeningocele is a common condition seen in newly born infants. These patients usually present quite late primarily because of the ignorance on the part of general population about the nature of the disease and difficulties in reaching the medical centres which provide specialised care. Fourteen patients were seen and treated surgically under local anaesthesia. The results of treatment and a short term follow-up is presented.

Material and Method

In all 20 patients were treated but only 12 patients are reported in this paper who have been followed up for 4 to 8 months. Of the 12 patients half presented at an average age of two months. One infant was one year old at the time of presentation while the rest were between the ages of one to ten weeks.

A clinical diagnosis was made easily. In each patient the head circumference was measured and the state of limbs was recorded. Haemoglobin estimation was also done in each case. The patients were kept well hydrated, blood transfusion was given when necessary at the rate of 200 mls per 8 Kg body weight.

Technique of Operation

The skin was cleaned with hibitane and spirit except the Sac of myelomeningocele and the infant was well wrapped with sterile sheets. A sand bag was used under the pelvis to decrease the CSF pressure. One percent Xylocaine was infiltrated subcutaneously at the margin of the lesion and a transverse elliptical incision was used for small meningocele while a vertical incision was preferred for larger lesions. The lesion was excised and as much neural tissue was preserved as was possible. The skin flaps were prepared by undermining the skin as far forward as the rectus abdominis, upwards upto scapular region and below up to the gluteal cleft. The dura mater was transfixed, ligated and divided. A vertical incision was then made over the sacrospinalis fascia one centimeter from the midline on each side and stitched over the dura and vertebral arch.

The skin cover was made with utmost care to prevent any tension.

Results

Two infants did not show any improvement in lower limb paralysis and they also developed hydrocephalus. Six patients who have been followed from 4 to 8 months have shown steady improvement without any sign of hydrocephalus while three infants made complete recovery. One patient has made satisfactory recovery but further surgery will be required to improve the lower limb function.

Discussion

This study was made on patients admitted in the hospital and would not reflect the spectrum of all types of meningocele and myelomeningocele in the community. The attitude towards the treatment of these infants has undergone a radical change. Initially it was considered that no surgery should be offered to these unfortunate children, while later the tendency was to operate on every child with meningocele (Nash 1963). The present attitude is to offer surgery in selected subjects where reasonably satisfactory results could be achieved. The follow up of successfully treated children is short and only further studies over a longer period of time will throw light on the late sequelae of these conditions. Non-availability of Spitz—Holter valve is a distinct disadvantage and those children who later develop hydrocephalus in the absence of a drainage procedure will be subject to poor prognosis.

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References

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