Infection of Cranioplasty Seen Twenty Years Later

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Cranioplasty is performed using autograft and allograft materials on patients to whom craniectomy was applied previously due to the facts that this region is open to trauma and the scalp makes irritation and pressure onto the brain paranchyma causing brain atrophy and convulsions. Dramatical improvement of neurological deficits, control of convulsions and partial prevention of cerebral atrophy are achieved after these operations.

One of the most important complications of cranioplasty is late infection. Here, we report a 43-year-old male patient admitted with the history of purulent discharge from the right temporal incision site for one year to whom cranioplasty had been performed with allograft material 20 days after craniectomy which had been performed in 1989. Allograft cranioplasty material was removed and cranioplasty was performed using new allograft material with the diagnosis of late cranioplasty infection.

Key Words: Cranioplasty · Cranioplasty infection · Late cranioplasty infection.

INTRODUCTION

Cranioplasty is performed for calvarial defects due to the facts that this region is vulnerable to trauma, calvarial defects may cause cerebral atrophy and convulsions or for cosmetic purposes. Improvement of neurological deficits, control of convulsions and partial prevention of cerebral atrophy are achieved after these operations.

Edwards and Ousterhout advocated autogenous bone graft being the most appropriate cranioplasty material for children and adolescents however allograft material was emphasized as the ideal graft for adults.

One of the most important complications of cranioplasty is late infection or foreign body reaction mimicking infection. Infections are usually seen 3-10 months after the cranioplasty operations however late infections presenting 20 years after cranioplasty operations as seen in our case are very rare.

CASE REPORT

A 43-year-old male patient was admitted to our hospital with the complaint of purulent discharge from the right temporal incision site for one year. Right temporal craniectomy had been performed for depressed skull fracture in 1989. Twenty days after craniectomy, cranioplasty had been performed to cranio-
the clinical presentation of the patient as always instead of im-
findings are detected in infected as well as uninfected patients
we still diagnosed the case as late cranioplasty infection.
indicates it. The culture of purulant discharge and removed graft
allograft material was emphasized to be more appropriate for
ed cranial and cranioplasty is only 20 days which is not long
In our case, infection of cranioplasty presented 20 years after
infection rates after cranioplasty are 1-13.5% (3,7,14). Infection
the previously used cranioplasty material in our case was allograft and we replaced
patients (1,3,7,14). In our case, the time interval between
interest. Improvement of neurological deficits, control
One of the most important complications of cranioplasty is
post-cranioplasty operations should not be short considering late cranioplasty infections.
no physical change.
CONCLUSION
In our case, infection of cranioplasty presented 20 years after
References


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*Ikaku Zashih* 87: 57-59, 1996


