process, and so were the filaments although much less in amount. Micro-
tubules of this type were not observed in the materials fixed with any previous
fixatives. Intracellular organelles such as dense nucleoplasm along the nuclear
membrane, cilia, microvilli and terminal bars identified in the first case
resembled the components in ependymoma and plexus papilloma. On the
other hand, some kinds of cells in glioblastoma and oligodendroglioma also
showed the microtubules in the perikaryon and processes. Two cell com-
ponents were thus suggested in medulloblastoma, i.e. the cell with ependymal
characteristics and the cells with microtubules the neurotubules in neuro-
dendrite or the microtubules in oligodendroglia.

48. Surgical Result for Glioma

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Fifty cases with brain tumor, which have been operated in our clinic
for last ten years, were presented. The cases with glioma were the most
in number, and these showed the worst surgical result.

In surgical treatment for glioma, the complete removal is most effective,
however, it may be impossible except small and localized glioma such as
astrocytoma or oligodendroglioma. Several other procedures of the treatment
i.e. radiation therapy, administration of anticancer agents and/or partial
resection of brain tumor to depress intracranial pressure have been attended
on the cases with brain tumor which is not removed completely.

We have applied the shunt operation which makes communication between
the lateral ventricule and subarachinoidal space by boring cylindrically
in the frontal lobe on such cases. This method revealed good result.

49. Treatment of Gliomas

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