

**Discussion to 109. The New Techique for the Treatment
of Intracranial Aneurysm. Preliminary Report of
Thrombosis Formation utilizing Stereotactic
Magnetically Controlled Iron Particles**

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In general, it has been pointed out that the majority of intracranial aneurysm which will rerupture do so within the first two weeks after the first rupture and that the mortality rate caused by rerupture shows a marked increase over that of the initial rupture. Therefore, it is obvious to have to have surgical intervention for ruptured intracranial aneurysm within the first two weeks before disastrous rerupture occurs. On the other hand early surgery following rupture of aneurysm has still been hesitated to do because of its high mortality rate postoperatively.

For the purpose of finding a simpler and safer method of the treatment for intracranial aneurysm, the technique of thrombosis formation utilizing stereotactic magnetically controlled iron particles has been studied in our clinic which might be achieved in early stage of ruptured case of aneurysm.

The procedure consists of the placement of special shaped magnet beside the aneurysm under stereotactic control and the injection of suspended iron particles into internal carotid artery. Following animal experiment it is clearly proved that the iron particles can be trapped and held in the aneurysm by the magnet to form a thrombus and the results is very encouraging to apply this technique in human patient.

Further studies are now going on in our clinic and more detailed report will be presented in the next Japan Neurosurgical Society Meeting.

110. Artificial Embolization with Liquid Plastic

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In the previous reports^{1,2)}, detailed techniques of the artificial embolization as a method of the treatment of large cerebral arteriovenous malformations has been discussed. Indications of this method have also been discussed according to the location of the lesion and accessibility of the feeding arteries. And it was