only one time after the stroke.

Therefore, the follow-up data that differs from each other through the course, above mentioned, may suggest the possibility of differential diagnosis of the both diseases.

S19. Ultrasonic Diagnosis of Apoplexy

Sadanori KIKUCHI, Kazufumi ITO, Yuichi ABE and Toshio WAGAI

Dept. of Surgery, Juntendo University School of Medicine

As already reported, the present writers have succeeded since 1952 in diagnosing brain tumors mainly employing A-scope indication method.

It is very important to differentiate accurately the cerebral hemorrhage from other condition such as stroke, not only for the purpose of an ordinary treatment but also for the surgical treatment of this disease.

In this paper the ultrasonic diagnosis of apoplexy will be presented.

Through the experiment of the formalin-hardened brain slice of apoplexy, the echoes from the hematoma are obtained by using brain slice with cerebral hematoma; however, no special echoes are observed in the case of brain softening and subarachnoid hemorrhage. The present writers then confirmed experimentally that artificial cerebral hematoma made by injection of blood coagula into a cat brain can be detected by using 5 megacycle ultrasound together with the finding of simultaneous shift of midline echo.

In clinical cases of intracerebral hemorrhage, echoes reflected from hematoma are generally detected together with the displacement of third ventricle echo. The echoes of hematoma show a characteristic pattern, irregularly grouped but continuous pulsive echoes. On the contrary, in the cases of subarachnoid hemorrhage and brain softening, remarkable echo is never observed.

Ultrasonic examination is very suitable for the quick diagnosis of these cases especially in acute cases.